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BEFORE THE ARIZONA CORPORATION COMMISSION

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BOB BURNS
COMMISSIONER

TOM FORESE
COMMISSIONER

ANDY TOBIN
COMMISSIONER

**IN THE MATTER OF THE
APPLICATION OF ARIZONA PUBLIC
SERVICE COMPANY FOR A
HEARING TO DETERMINE THE FAIR
VALUE OF THE UTILITY PROPERTY
OF THE COMPANY FOR
RATEMAKING PURPOSES, TO FIX A
JUST AND REASONABLE RATE OF
RETURN THEREON, TO APPROVE
RATE SCHEDULES DESIGNED TO
DEVELOP SUCH RETURN.**

DOCKET NO. E-01345A-16-0036

DOCKET NO. E-01345A-16-0123

Arizona Corporation Commission

DOCKETED

DEC 28 2016

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**IN THE MATTER OF FUEL AND
PURCHASED POWER
PROCUREMENT AUDITS FOR
ARIZONA PUBLIC SERVICE
COMPANY.**

**ENERGY FREEDOM COALITION
OF AMERICA'S NOTICE OF FILING
REDACTED DIRECT TESTIMONY
(REVENUE REQUIREMENT) OF
MARK E. GARRETT**

Energy Freedom Coalition of America ("EFCA") hereby provides notice of filing the Redacted Direct Testimony (Revenue Requirement) of Mark E. Garrett in the above referenced matter. A copy of the un-redacted Direct Testimony will be provided to the Legal Department and to Arizona Public Service Company ("APS"). Parties who have signed the APS Protective Agreement will be able to view the confidential portion of Mr. Garrett's testimony by accessing the APS Rate Case website.

1 Respectfully submitted this 28th day of December, 2016.

3 /s/ Court S. Rich

4 Court S. Rich

5 Rose Law Group pc

6 Attorney for Energy Freedom Coalition of America

7 **Original and 13 copies filed on**
8 **this 28th day of December, 2016 with:**

9 Docket Control
10 Arizona Corporation Commission
11 1200 W. Washington Street
12 Phoenix, Arizona 85007

13 *I hereby certify that I have this day served a copy of the foregoing document on all parties of*
14 *record in this proceeding by regular or electronic mail to:*

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF)
ARIZONA PUBLIC SERVICE COMPANY FOR A)
HEARING TO DETERMINE THE FAIR VALUE OF)
THE UTILITY PROPERTY OF THE COMPANY)
FOR RATEMAKING PURPOSES, TO FIX A JUST)
AND REASONABLE RATE OF RETURN)
THERON, TO APPROVE RATE SCHEDULES)
DESIGNED TO DEVELOP SUCH RETURN)

DOCKET NO. E-01345A-16-0036

IN THE MATTER OF FUEL AND PURCHASED
POWER PROCUREMENT AUDITS FOR ARIZONA
PUBLIC SERVICE COMPANY.

DOCKET NO. E-01345A-16-0123

DIRECT TESTIMONY

OF

MARK E. GARRETT

REVENUE REQUIREMENT ISSUES

ON BEHALF OF

ENERGY FREEDOM COALITION OF AMERICA ("EFCA")

December 28, 2016

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I. WITNESS IDENTIFICATION AND PURPOSE OF TESTIMONY

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A: My name is Mark E. Garrett. My business address is 50 Penn Place, 1900 N.W. Expressway, Suite 410, Oklahoma City, Oklahoma 73118.

Q: WHAT IS YOUR PRESENT OCCUPATION?

A: I am the President of Garrett Group, LLC, a firm specializing in public utility regulation, litigation and consulting services.

Q: WOULD YOU PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR PROFESSIONAL EXPERIENCE RELATED TO UTILITY REGULATION?

A: I received my bachelor's degree from the University of Oklahoma and completed post graduate hours at Stephen F. Austin State University and the University of Texas at Arlington and Pan American. I received my juris doctorate degree from Oklahoma City University Law School and was admitted to the Oklahoma Bar in 1997. I am a Certified Public Accountant licensed in the States of Texas and Oklahoma with a background in public accounting, private industry, and utility regulation. In public accounting, as a staff auditor for a firm in Dallas, I primarily audited financial institutions in the State of Texas. In private industry, as controller for a mid-sized corporation in Dallas, I managed the Company's accounting function, including general ledger, accounts payable, financial reporting, audits, tax returns, budgets, projections, and supervision of accounting

1 personnel. In utility regulation, I served as an auditor in the Public Utility Division of
2 the Oklahoma Corporation Commission from 1991 to 1995. In that position, I managed
3 the audits of major gas and electric utility companies in Oklahoma. Since leaving the
4 Commission, I have testified in numerous rate cases and other regulatory proceedings on
5 behalf of various customer interveners.
6

7 **Q: HAVE YOUR QUALIFICATIONS BEEN ACCEPTED BY THIS COMMISSION**
8 **IN PROCEEDINGS DEALING WITH REVENUE REQUIREMENT ISSUES?**

9 A: Yes, they have. A more complete description of my qualifications and a list of the
10 proceedings in which I have been involved are attached to this testimony.
11

12 **Q: ON WHOSE BEHALF ARE YOU APPEARING IN THESE PROCEEDINGS?**

13 A: I am appearing on behalf of Energy Freedom Coalition of America ("EFCA").
14

15 **Q: WHAT IS EFCA'S INTEREST IN THIS PROCEEDING?**

16 A: EFCA's primary interest in this phase of the proceeding is to help ensure that the rates
17 that result from this case are *just and reasonable* rates – fair to both the Company and its
18 customers. EFCA is also interested in helping maintain and encourage consumer choice
19 and fair rate setting practices, particularly as it applies to the Company's solar customers
20 and those customers who hope to power their homes and businesses with solar in the
21 future.
22

1 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A: The purpose of my testimony is to address various revenue requirement issues identified
3 in Arizona Public Service Company's ("APS's") rate case application and to provide the
4 Commission with recommendations for the resolution of these issues. I also sponsor
5 *Exhibit MG 2* included with this testimony, in which the overall impact of EFCA's
6 revenue requirement recommendations is set forth. In total, EFCA's recommendations
7 result in a rate decrease, as outlined in the following section of testimony.

II. SUMMARY OF RECOMMENDATIONS (in millions)

APS's Proposed Rate Increase	\$165,882
<u>Cost of Capital Adjustments</u>	
Apply EFCA's ROE and Capital Structure Adjustments	(128,511)
<u>Revenue and Expense Adjustments</u>	
Remove 50% of Annual Incentive Plan	(16,971)
Remove 50% of Payroll Tax on Annual Incentive Plan	(1,139)
Increase Revenues for Load Growth	(28,626)
Remove APS's Proposed Fair Value Adjustment	(51,866)
Remove 50% of EEI Dues Expense	(352)
<u>Depreciation and Amortization Expense Adjustments</u>	
Remove Accelerated Depreciation for Cholla Units 1 and 3	(23,915)
Adjust Other Depreciation Rates	(22,016)
Total of EFCA Adjustments	\$(273,396)
Proposed Rate Decrease	<u>\$(107,514)</u>

III. SHORT-TERM INCENTIVE COMPENSATION EXPENSE ADJUSTMENT

1 **Q: PLEASE PROVIDE A BRIEF DESCRIPTION OF APS's ANNUAL INCENTIVE**
2 **COMPENSATION PLAN.**

3 A: APS provides an annual cash incentive compensation plan to all employees. The
4 Company seeks to include \$36,730,959 for annual incentive plan costs.

6 **Q: WHAT ADJUSTMENT ARE YOU PROPOSING WITH RESPECT TO THE**
7 **COMPANY'S ANNUAL TEAMSHARE INCENTIVE PLAN?**

8 A: I am proposing to exclude 50% of the short-term incentive plan expense. This is
9 consistent with the longstanding treatment of incentive compensation plan costs in most
10 states. This recommended sharing of incentive plan costs between the utility and its
11 customers reflects the fact that both the company and its customers benefit from a well-
12 designed plan. It also reflects the fact that a major purpose of the APS plan is to increase
13 the financial performance of APS. As a general rule, regulatory commissions exclude
14 the costs of incentive compensation associated with financial performance.¹

¹ See ALJ's Proposal for Decision in Texas PUC Docket No. 28840, Footnote 284, in reference to the CCR Initial Brief at 25, in which the following list of cases showing that incentives are disallowed in many states as a matter of policy is found. See, *U.S. West Communications, Inc. v. Public Service Comm'n*, 901 P.2d 270, 276-77 (Utah 1995); *Central Illinois Public Service Company Proposed General Increase In Natural Gas Rates*, Docket No. 02-0798 (Cons.), 2003 Ill. PUC LEXIS 824, p. 115 (Illinois Commerce Comm'n 2003); *Application of Wisconsin Power and Light Company as an Electric, Natural Gas and Water Utility for Authority to Change Electric, Natural Gas, and Water Rates*, Docket No. 6680-UR-113, 2003 Wisc. PUC LEXIS 822, pp. 40-41 (Wisconsin Public Service Comm'n 2003); *Petition of Northern States Power Company's Gas Utility for Authority to Change its Schedule of Gas Rates for Retail Customers Within the State of Minnesota*, 146 P.U.R.4th 1, pp. 40-43 (Minnesota Public Util. Comm'n 1993); *Application of Minnegasco, a Division of NorAm Energy Corp., for Authority to Increase its Natural Gas Rates in Minnesota*, 170 P.U.R.4th 193, pp. 69-77 (Minnesota Public Util. Comm'n 1996). Also, see the results of the Incentive Survey conducted by the Garrett Group which are provided in this testimony.

1 Q: WHAT IS THE GENERAL RATIONALE FOR EXCLUDING INCENTIVE
2 COMPENSATION TIED TO THE FINANCIAL PERFORMANCE OF THE
3 UTILITY?

4 A: In most jurisdictions, the cost of incentive plans tied to financial performance measures
5 are excluded for ratemaking purposes. When the costs associated with these plans are
6 excluded, the rationale used by regulators is often based on one or more of the following
7 reasons:

8 (1) **Payment is uncertain.** Often times incentive payments are discretionary
9 payments conditioned upon meeting some predetermined financial goal such as
10 achieving a certain increase in earnings or reaching a targeted stock price. If the
11 predetermined goals are not met, the incentive payments are not made, or the
12 payments are made at some lesser amount. Therefore, one cannot know from
13 year to year what the level of the payment may be or whether the payment will be
14 made at all. It is generally considered inappropriate to set rates to recover a
15 tentative level of expense.²

16 (2) **Many of the factors that significantly impact earnings are outside the control**
17 **of most company employees and have limited value to customers.** For
18 example, an unusually hot summer can easily trigger an incentive payment based
19 on company earnings for an electric utility, as a cold winter can for a gas utility.
20 Obviously, weather conditions are outside the control of utility employees and
21 customers receive no benefit from the higher utility bills that result from an
22 unusually hot or cold weather. Similarly, company earnings can increase as a
23 result of customer growth, thus triggering incentive payments, but customer
24 growth commonly occurs without significant influence from most company
25 personnel. Moreover, since shareholders enjoy the benefits of customer growth
26 between rate cases, shareholders should also bear the cost of any incentive
27 payments that growth may trigger. As a final example, utility earnings may
28 increase substantially if the utility is able to successfully argue for a higher ROE
29 in a rate case proceeding. Utility efforts to maximize ROEs in a rate proceeding,
30 however, have little to do with improving overall employee performance across

²An example of this problem is found in the 2008 rate case proceeding of Public Service Co. of Oklahoma ("PSO"), Oklahoma PUD 08-144. In 2009, PSO's parent company, AEP, failed to achieve its target EPS, and elected to reduce the funding available for incentive compensation payments by 76.9%. Thus, although the Commission in PSO's 2008 rate case had approved more than \$4 million in rates for incentives, the Company was free to subsequently elect not to use all of that money to pay employee incentives, but instead retained some of those funds for its shareholders to help bolster earnings for that year.

1 the company. If utility employees gear their efforts toward securing an
2 *unreasonably* high ROE in a rate proceeding, the incentive mechanism would
3 actually work to the detriment of the customers.

4 (3) **Earnings-based incentive plans can discourage conservation.** When incentive
5 payments are based on earnings, employees may not support conservation
6 programs designed to reduce usage if they perceive these programs could
7 adversely impact incentive payment levels. To the extent that earnings-based
8 incentive plans discourage conservation and demand-side management programs,
9 these plans do not serve the public interest. The growing focus on energy
10 efficiency at both the national and state level renders this point especially
11 important.

12 (4) **The utility and its stockholders assume none of the financial risks associated**
13 **with incentive payments.** Ratepayers assume the risk that the utility will instead
14 retain the amounts collected through rates for incentive payments whenever
15 targeted increases are not reached. Employees assume the risk that the incentive
16 payments will not be made in a given year. The utility and its stockholders,
17 however, assume no risk associated with these payments. Instead, the company's
18 only responsibility is to decide who gets the money, the stockholders or the
19 employees.³

20 (5) **Incentive payments based on financial performance measures should be**
21 **made out of increased earnings.** Whatever the targets or goals may be that
22 trigger an incentive payment, when the plan is based in whole or in part on
23 financial performance measures the company always obtains a financial benefit
24 from achieving these objectives. This financial benefit should provide ample
25 funds from which to make the payment. If not, the incentive plan was poorly
26 conceived in the first place. As such, employees should be compensated out of
27 the increased earnings, and not through rates.

28 (6) **Incentive payments embedded in rates shelter the utility against the risk of**
29 **earnings erosion through attrition.** When utilities are allowed to embed
30 amounts for incentive payments in rates, that money is available to the utility not
31 only to pay the incentive payment when financial performance goals are met but
32 also to supplement earnings in those years when the company does not perform
33 well. In those years when financial performance measures are met, the increased
34 earnings of the company provide ample additional funds from which to make the
35 incentive payments to employees, and the incentive payment amount embedded
36 in rates is not needed. In those years when financial performance measures are
37 not met and the incentive payments are not made, the amount embedded in rates

³ As discussed, this occurred in the 2008 rate case of Public Service Co. of Oklahoma. In 2009, when AEP's EPS fell below targeted levels, the Company simply retained for its stockholders the funds that had been provided in rates for incentive plans.

1 for incentive payments acts as a financial hedge to shelter the poor financial
2 performance of the company.

3 **Q: HOW DO OTHER JURISDICTIONS TREAT INCENTIVE COMPENSATION?**

4 A: The results of an Incentive Compensation Survey of the 24 Western States taken by the
5 Garrett Group LLC in 2015⁴ shows that a clear majority of the states follow the
6 financial-performance rule, in which incentive payments associated with financial
7 performance are excluded from rates. Some states disallow incentive pay using other
8 criteria. As a general rule, none of the jurisdictions surveyed allow full recovery of
9 incentive compensation through rates. The results of the survey are set forth below.

States that follow some version of the Financial-Performance Rule:

10 **Arizona** The Commission deals with incentive compensation plans on a case by
11 case basis. Evaluation centers on the criteria of benefit to customers.
12 This treatment tends to make long-term programs harder to justify, but the
13 same criteria are used to evaluate all plans including those for executives.
14 This treatment is set forth in the most recent Epcor Water rate case.⁵ The
15 current treatment represents a somewhat more liberalized approach
16 compared to Arizona's former position of excluding all incentive
17 compensation from rates.

18 **Arkansas** Excludes 100% of the long-term, equity-based plans, and short-term
19 incentive plans are evaluated to determine if they are based on financial
20 or operational measures. Operational-based plans are allowed and plans
21 containing financial measures are partially disallowed. Plans based solely
22 on the discretion of the company are seen as having no direct benefit to
23 ratepayers and are disallowed 100%. Settlements in recent cases have
24 upheld this treatment.⁶ Commission rulings on incentive compensation
25 have remained generally consistent, excluding 100% of long-term plans
26 and 50% of short-term plans that include financial measures. This
27 treatment has been qualified in recent cases based on differing plan

⁴, The Garrett Group LLC Incentive Compensation Survey of the 24 Western States was first conducted in 2007, and was updated in 2009, 2011, and 2015.

⁵ Epcor Water, Docket No. WS-01303A-14-0010. See also UNS Electric 2008 rate case, Decision 70360, Southwest Gas 2008 rate case, Decision 70665 and UNS Gas 2008 rate case, Decision 70011.

⁶ Entergy Arkansas, Docket No. 06-101-U, Order No. 10 and Docket No. 13-028-U, Order No. 21.

1 structures. In the most recently litigated Entergy rate case (Docket No.
2 13-028-U), 50% of all short-term incentive compensation was excluded
3 because the plans included a financially-based multiplier.

4 **California** The Commission has established precedence for evaluating plans based
5 on who benefits from the plans goals, ratepayer or shareholders. In
6 CPUC Decision 00-02-046, the Commission established that utilities
7 could recover 50% of the regular employee's incentive compensation
8 costs in rates. In the Southern California Edison litigated rate case
9 Decision 09-03-025, the Commission decided that Edison's non-
10 executive plans and 50% of the short-term executive plans would be
11 funded in rates and that 100% of the executive long-term stock plans
12 would be disallowed.⁷ In a recent case, A.10-07-007, staff recommended
13 that, "customer funding should be limited to the portion of the incentive
14 plan payments that are aligned with operational objective that provide
15 customer benefits. This means that 70% of AIP be funded by
16 shareholders, and 30% be funded by ratepayers." In the settlement, the
17 Commission disallowed 50% of the plan's expense.

18 **Hawaii** Incentive compensation of all types is excluded from rates. The
19 Commission upholds the position stated in Docket No. 6531 that
20 incentives tied to company income and earnings benefit stockholders, not
21 ratepayers. The Commission further stated, "...we believe that a utility
22 employee, especially at the executive level, should perform at an
23 optimum level without additional compensation. Ratepayers should
24 not be burdened with additional costs for expected levels of service."⁸
25 Utilities in Hawaii no longer petition to have incentive compensation
26 expense included in rates.

27 **Idaho** The Commission's policy for evaluating incentive compensation plans
28 involves determining who benefits, the customer or the company. This
29 treatment was refined in the Idaho Power rate case, IPC-E-08-10, for
30 plans which benefit the customer but require a financial trigger to be paid.
31 For these plans the Commission reduced the percentage allowed in rates.
32 The Commission does not include executive compensation in rates.⁹

⁷ Southern California Edison (Application No. 07-11-011; Decision No. 09-03-025).

⁸ Hawaii's policy is set forth in Docket No. 6531 in the October 17, 1991 Order No. 11317. Prior Dockets in which the Commission disallowed incentive compensation include No. 3216, No. 4215, No. 4588 and No. 5114.

⁹ The Commission's focus on customer benefit is reflected in the direct testimony of Staff witness Leckie, and in the final order for the recent IPC General Rate Case IPC-E-08-10. For earlier examples of the basic policy, see Idaho Power Company Rate Case IPC-E-05-28, Corrected Motion for Approval of Stipulation 3/1/06, 6e, p. 4; Idaho Power Company IPC-05-28, Order No. 30035, p. 4/10.

Kansas For officer level incentives plans, the financially-based portion is borne by the shareholders and the portion supporting operational goals is allowed in rates. Non-officer incentive compensation plans for workers are allowed in rates.¹⁰ The consumer advocacy branch, Citizens' Utility Ratepayer Board (CURB) has consistently recommended applying the same financial/operational criteria to non-officer plans as well. In the current KCPL rate case the company has voluntarily excluded 100% of the performance-based plans and 50% of the short-term plans with an earnings-per-share qualifier. The Company also removed the earnings-per-share portion of their plan for all employees.

Louisiana Traditionally incentive compensation for upper level management and officers is excluded, while costs for lower level managers and employees are allowed. The criteria used to evaluate plan design consider whether the goals of each plan directly benefit ratepayers or shareholders. Stock based compensation plans at all levels are excluded.

Minnesota Minnesota continues to distinguish between incentive plans tied to financial triggers (such as a threshold ROE) and plans tied to criteria benefitting the ratepayer. Plans based on goals which benefit ratepayers are generally allowed in rates, but their costs are frequently capped at a percentage of base salaries such as 15% or 25%.¹¹ Utilities are usually required to return to ratepayers any portion of incentive pay that was allowed into rates and is not subsequently paid out to employees. Executive and long-term IC measures are frequently more closely aligned with shareholder interests and thus are not usually allowed in rates.¹²

Missouri Plans are analyzed to determine who benefits. Plans that can show a direct benefit to customers and that are found to be prudent are allowed in rates. Plans that benefit shareholders are excluded. The Commission also allows only the amounts actually paid, not those accrued. The same criteria are used for executive plans and few are allowed.¹³

¹⁰ This treatment is based on the 2012 KCPL rate case (12-KCPE-764-RTS) in which the short-term plan was split 50:50, and for the long-term incentives, the Commission excluded 100% of the portion based on stockholder return and 50% of the time-based restricted stock portion of the plan. Time-based plans which vest solely on the passage of time are seen as being neutral and therefore split 50:50 between shareholders and ratepayers.

¹¹ This general policy is demonstrated in recent orders in the Minnesota Power and Ottertail rate cases: E002/GR-09-1151 and E002/GR-10-239 respectively.

¹² Minnesota's general policy is demonstrated in CenterPoint Energy rate case G-008/GR-13-316 and the Minnesota Power and Ottertail rate cases: E002/GR-09-1151 and E002/GR-10-239 respectively. See also Minnesota Power General Rate Case E002/GR/05/1428.

¹³ See e.g., in the latest Missouri American rate case (WR-2010-0131), not only were plans based on financial goals disallowed, but incentive payments based on customer satisfaction were disallowed due to

1	Montana	Due to the low volume of litigated cases in the past 10 to 15 years in
2		Montana, incentive compensation has not been an important issue before
3		the Commission. However, the Commission tends to become more
4		concerned by incentive plans that are tilted toward financial performance
5		instead of operational goals.
6	Nebraska	Nebraska does not have rules regarding incentive compensation and
7		considers the issue on a case by case basis. In a 2007 rate case, NG-0041,
8		the Commission disallowed 50%, directing that cost should follow benefit
9		and stating, "However, the Commission further finds that the nature of the
10		objectives appear to benefit both ratepayers and shareholders and it would
11		be improper for the ratepayers to bear the full cost of this benefit." The
12		Commission also allowed in rates only the actual amounts paid. In NG-
13		0060 the Commission disallowed the entire amount requested by
14		SourceGas for cash incentives.
15	Nevada	The Commission excludes 100% of the long-term plans and all short-term
16		plan costs directly related to financial performance. ¹⁴
17	New Mexico	Incentive programs tied to measures that benefit ratepayers (such as
18		operation and safety) are allowed in rates. Programs tied to the financial
19		performance of the utility (e.g. stock price or ROE) are not allowed in
20		rates. This standard is applied to all levels of utility employees and tends
21		to eliminate the greater portion of executive plans. ¹⁵ Executive incentive
22		plans receive more scrutiny as they are more likely to have financial
23		measures. They can also be challenged if the overall percentage is out of
24		line. One major utility in New Mexico no longer includes the
25		compensation of its top 5 executives in rate applications.
26	N. Dakota	In North Dakota, the general policy is the portion that relates to earnings
27		of the shareholders is disallowed and the rest is included. In the past, the
28		Commission has limited incentives to 15% of salary. The general
29		approach is to determine if incentive compensation is reasonable and fair

the unreasonably small sample size used to establish a positive rating (a phone survey of 927 of roughly 450,000 customers). The Commission also removed incentive payments tied to lobbying and charitable activity. In the most recent case processed, the Ameren UE rate case, the company did not seek even short-term incentive compensation tied to earnings, providing further indication that staff's practice of disallowing financial performance based incentives is accepted by the companies. All incentive compensation adjustments were made not only to expense charges, but to construction charges as well. See also Kansas City Power and Light and Empire Electric District orders on the Commission's website.

¹⁴ See e.g., PUCN's final order in Docket 11-06006.

¹⁵ See e.g., Docket 07-00077-UT.

1 based on market analysis. Historically, executive incentive compensation
2 is not allowed in rates, and is typically not sought by the company.

3 **Oklahoma** The Commission excludes incentive payments tied to financial
4 performance. From a practical perspective this means that all long-term
5 plans are excluded and some portion of the annual short-term cash plan
6 are excluded. The Commission does not determine the precise portion of
7 the annual plans tied to financial measures but instead excludes 50% of
8 the annual plans. 100% of the long-term executive stock-based plans are
9 excluded.¹⁶

10 **Oregon** The Commission's general policy is based on the idea that customers
11 should not have to pay for incentive compensation based on financial
12 goals such as rate of return. For short-term plans, the portion based on
13 financial measures is excluded from rates. The only long-term plans are
14 for officers, and 100% of officer incentives are excluded from rates.

15 **S. Dakota** South Dakota considers incentive compensation on a case by case basis.
16 Their general policy is to evaluate each plan and disallow the portion
17 based on financial performance indicators. This treatment is set forth in
18 the recent case EL14-026 in which the order specifically excluded the
19 amount "tied to the Company's financial results."¹⁷ Current treatment also
20 includes disallowing both executive and non-executive management
21 incentive compensation. Several utilities have whole incentive programs
22 that hinge on whether or not the company earns a certain return. These
23 financial prerequisites cause the whole plans to be excluded from rates.

24 **Texas** The general rule at the PUC is that incentive payments designed to
25 improve the financial performance of the utility are excluded.¹⁸ Long-

¹⁶ See e.g., AEP/PSO Cause Nos. PUD 06-285, PUD 08-144, and PUD 15-208; OG&E Cause No. PUD 05-151; and ONG Cause No. PUD 04-610.

¹⁷ In Docket No. EL 08-030 the settlement excluded bonuses related to "stockholder-benefitting financial goals." The settlement in Xcel rate case Docket No. EL09-009 removed payments based on financial performance indicators. In the settlement agreement signed July 7, 2010 in the Black Hills Power rate case Docket No. EL09-018 the *Staff Memorandum* states, "The settlement removes financial based incentive payments that were included in the capitalized labor costs for plant. Shareholders are the overwhelming beneficiaries of incentive plans that promote the financial performance of the Company and therefore should be responsible for the cost of such compensation."

¹⁸ For example, see the *Application of AEP Texas Central Company for Authority to Change Rates*, Docket No. 28840; SOAH Docket No. 473-04-1033, Final Order (August 15, 2005), where the Commission disallowed sixty-six percent (66%) of AEP-Texas Central's test year incentive payments in the amount of \$4.2 million. This was the portion of the utility's incentive payments that were based on financial performance measures. See ALJ's Proposal for Decision at page 113 in PUC Docket No. 28840, SOAH Docket No. 473-04-1033, issued July 1, 2004. The PFD with respect to the treatment of incentive compensation was adopted by the Commission in its Final Order.

term stock incentives are strictly excluded. Also, at the RRC, financial incentives are generally excluded. Examples include Atmos 9670, Texas Gas Service Company 9988, Centerpoint 9902 and Centerpoint 10106. In Docket 9670 both the executive and employee plans for Atmos Mid-Tex were found not to be just and reasonable because they, "advanced the interest of shareholders, and [are] driven by Company earnings." None of the costs of these programs were allowed in rates. In TGS Docket 9988, the RRC found 100% of long-term and 90% of short-term incentives expense was "unreasonable" because it was related to the financial performance of the utility's parent ONEOK Inc. 10% of the short-term plan was allowed in rates because it was based on safety metrics.

Utah The Commission's general policy is to allow in rates the parts of a plan that are tied to ratepayer benefit and disallow the parts tied to financial goals. Equity-based incentive compensation is all excluded from rates.¹⁹

Washington Incentive plans are evaluated on a case by case basis. Incentives tied to operational efficiency or other measures which benefit ratepayers are allowed in rates and incentives based on return on earnings or other measures that benefit the shareholders are disallowed.²⁰

Wyoming Historically, employee incentive compensation plans are evaluated on a case by case basis, distinguishing between employee programs that benefit the ratepayer or the stockholders and requiring the benefitting party to pay. Executive incentive compensation plans are all excluded from rates.

States that use another approach

Alaska Most utilities in Alaska are either coops or municipalities that do not pay their employees incentives, so incentive compensation is not a rate case issue in Alaska. Thus, there are no relevant regulations or policies in place concerning incentives.

Colorado All executive incentives are excluded from rates and typically no longer sought in company filings. With respect to annual incentive pay (AIP), Colorado used to evaluate incentive plans based on which stakeholder group benefited from the goals of a plan. In the most recent rate case for Public Service Company of Colorado, however, staff recommended that

¹⁹ The recent final order in Docket 09-035-23 follows this general policy as does the order in Docket 07-35-93. See also Missouri Corp. Rate Case Docket 97-035-01, pp. 10-12; US West Communications Rate Case Docket 95-049-05.

²⁰ See the Order in Pacific Power and Light Docket 061546.

1 the Commission, "limit reimbursement of incentive pay to no more than
2 15 percent of employee base salary." In this proceeding, No. 14AL-
3 0660E / Order C15-0292, the Settlement Agreement included the
4 statement, "the Settling Parties agree AIP incentive payment recovery in
5 the 2017 Rate Case will be capped at 15% of an employee's salary."

6 **Iowa** Incentive Compensation has not been an issue in Iowa. There are no
7 specific treatments in place and the Commission will review the merits
8 and prudence of a proposed plan on a case-by-case basis.

9 **Q: WHY IS THE DISTINCTION BETWEEN FINANCIAL PERFORMANCE**
10 **MEASURES AND OPERATIONAL MEASURES AN IMPORTANT**
11 **DISTINCTION FOR INCENTIVE COMPENSATION ANALYSIS?**

12 A: When incentive compensation payments are based on financial performance measures,
13 the compensation agreement between shareholders and employees could be loosely
14 stated in this manner: "if you will help increase shareholder earnings, we will pay you a
15 bonus." The intended beneficiaries to this agreement are the shareholders and the
16 employees. Ratepayers have no stake in this agreement; therefore, they should bear none
17 of the costs that result from such an agreement. If, instead, the agreement were stated in
18 this manner: "if you will help increase reliability and quality of service to the customers,
19 we will pay you a bonus," then, ratepayers would have a stake in the agreement, and
20 could share in a portion of the costs. However, so long as some portion of the incentive
21 plan is designed to increase earnings, that portion of the plan should be funded out of the
22 increased earnings the plan helps produce.

23
24 **Q: UTILITIES OFTEN CLAIM THAT INCENTIVE PLANS SHOULD BE**
25 **INCLUDED IN RATES BECAUSE THEY ARE PART OF A TOTAL**

1 **COMPENSATION PACKAGE THAT IS COMPARABLE WITH**
2 **COMPENSATION PAID BY OTHER UTILITIES AND ARE NEEDED TO**
3 **ATTRACT AND RETAIN QUALIFIED PERSONNEL. DO YOU AGREE?**

4 A: In my experience, this is the argument typically raised by utilities seeking to justify
5 inclusion of incentive pay in rates. The argument, however, is problematic. First, it
6 misses the point. The question for regulators is not about what the company should pay;
7 the question is about what ratepayers should pay. The utility company is free to offer
8 whatever compensation package it wants to offer, but most commissions agree that
9 ratepayers should not pay the costs of plans designed to increase corporate earnings.
10 Also, as stated above, because incentive pay related to financial performance is generally
11 disallowed, most of the utilities with which the Company competes generally do not
12 recover their financial-based incentive compensation in rates. Therefore, the Company
13 is not placed at a competitive disadvantage when its incentive pay is similarly adjusted.

14 The other common problem with the "total compensation package" argument is
15 that when an incentive payment is based on achieving financial performance goals there
16 should be a financial benefit to the company that comes from achieving these goals.
17 This financial benefit should provide ample additional funds from which to make the
18 incentive payments. If not, the plan was poorly conceived. Thus, a utility is not placed
19 at a competitive disadvantage when incentive payments tied to financial performance are
20 not collected through rates, because the funding for these payments should come out of
21 the additional earnings the incentive plans help achieve.

1 **Q: IS THE OVERALL REASONABLENESS OF APS'S TOTAL COMPENSATION**
2 **RELEVANT TO THE ANALYSIS OF WHETHER INCENTIVE PAYMENTS**
3 **SHOULD BE RECOVERED IN RATES.**

4 **A:** No. The reasonableness of the amount paid, for any expense, only comes into the
5 evaluation *after* one has determined that a particular expense is includible for ratemaking
6 purposes. If an expense, by its nature, is not properly recoverable through rates – such as
7 charitable contributions, lobbying expense, charitable contributions, promotional
8 advertising, stock-based incentives, or financial-based short-term incentives – it does not
9 matter whether the overall expense is reasonable in amount, regulators exclude the entire
10 amount because the expense is not necessary for the provision of service.

11 Although regulated utilities frequently advance this argument to support the
12 inclusion of incentive pay in utility rates, regulators routinely reject it. It does not matter
13 that the amount paid for a cost is reasonable if the cost itself is not the type of cost that is
14 recoverable in rates. Thus, even if the Company's overall compensation structure is
15 reasonable, this does not affect the policy-driven analysis as to whether certain financial-
16 based incentive costs should be borne by shareholders rather than ratepayers.

17 In my opinion, it is inappropriate to shift the focus onto the reasonableness of the
18 total compensation package. A utility cannot transform its financial-based incentive
19 compensation costs into costs that are includible for ratemaking purposes by simply
20 arguing that the utility's total compensation structure is reasonable.

1 **Q: IN YOUR EXPERIENCE, WHEN REGULATORS EXCLUDE THE PORTION**
2 **OF A UTILITY'S INCENTIVE PLAN TIED TO FINANCIAL PERFORMANCE**
3 **MEASURES, DOES THE UTILITY STOP OFFERING INCENTIVE**
4 **COMPENSATION TO HELP ACHIEVE ITS FINANCIAL GOALS?**

5 No. Even though regulators generally disallow incentive compensation tied to financial
6 performance for ratemaking purposes, utilities continue to include financial performance
7 as a key component of their plans. In my opinion, utilities continue to tie incentive
8 payments to financial performance because by doing so they achieve the primary
9 objective of the incentive plans: to increase corporate earnings and, thereby, earnings per
10 share. However, since the utility retains the increased earnings these plans help achieve,
11 the payments related to these plans should be made from a portion of the increased
12 earnings of the Company. Thus, ratepayers need not subsidize properly designed
13 incentive compensation plans.

14
15 **Q: WHAT ARE YOU RECOMMENDING WITH RESPECT TO THE COMPANY'S**
16 **INCENTIVE EXPENSE?**

17 **A:** I am recommending a 50/50 sharing of the short-term incentive plan costs between
18 shareholders and ratepayers. This recommendation is based on the recognition that more
19 than 50% of the Company's incentive compensation plan goals are related to financial
20 performance measures, while a smaller percentage relates to customer satisfaction and
21 reliability. Because ratepayers receive at least some benefit from these customer-related
22 goals, some portion of the plan costs can be included in rates. The precise delineation

1 between financial and operational goals for the 2014 and 2015 APS plans is set forth at
2 Confidential Exhibit MG-1, attached to this testimony. This exhibit demonstrates why a
3 50/50 sharing of short-term incentive costs is a reasonable recommendation.
4

5 **Q: DO SOME STATES USE A SHARING APPROACH FOR ANNUAL INCENTIVE**
6 **PLANS, SIMILAR TO THE 50/50 APPROACH YOU SUGGEST?**

7 A: Yes. Several states use a sharing approach to allocate the benefits derived from
8 incentives plans between shareholders and ratepayers, when incentive plans contain both
9 financial and operational measures. Some examples follow:

10 **Arizona:** The commission follows the general rule that costs associated with
11 financial performance are excluded. In practice, this means that the costs of long-term
12 plans are excluded altogether and the costs of the short term annual cash plans, on many
13 occasions, have been shared 50/50 between shareholders and ratepayers.²¹ For example,
14 please refer to the decisions in the APS 2008 rate case, Decision 70360, the Southwest
15 Gas 2008 rate case, Decision 70665 and the UNS Gas 2008 rate case, Decision 70011.

16 **Arkansas:** In the 2013 Entergy Arkansas rate case, the Arkansas commission
17 disallowed 50% of the Company's annual incentive plan because the plan had both
18 financial and operational goals.²² In the 2015 Entergy rate case, the parties settled the
19 case, but the Arkansas Commission rejected the stipulation because it would have
20 allowed more than 50% of the Company's incentive costs in rates.

²¹ See f

²² Docket No. 13-028-U.

1 **Kansas:** Plans based solely on financial goals are not allowed. For executive
2 incentive programs, the Commission also disallows 100% of plans based on financial
3 measures and 50% for plans using a balance of financial and operational measures.

4 **Oklahoma:** In Oklahoma, the Commission has consistently excluded 50% of
5 annual incentive plans, except for two ONG rate cases in which the Commission
6 excluded 100% of the ONG's plan costs because of its parent company's (ONEOK)
7 funding mechanism.²³ The OCC recognizes that incentive plans that contain both
8 operational and financial measures benefit both the utility's shareholders and its
9 customers. As an example, in AEP/PSO's 2008 rate case, PUD 200800144, the
10 Commission once again disallowed 50% of AEP/PSO's annual incentive plan costs
11 stating:²⁴

12 The Commission finds that although there is no evidence to conclude
13 PSO's and AEPSC's overall salary levels are excessive, that the
14 recommendation of the AG and Staff to disallow 50% of PSO's and
15 AEPSC's incentive compensation should be adopted. Incentive
16 compensation benefits both shareholders and ratepayers equally, by
17 encouraging the attainment of goals that provide good customer service
18 and increase the earnings of the shareholders.

19 **Oregon:** The long-standing practice in Oregon has been to divide incentive
20 plans into "merit" plans and "performance" plans. Merit plans are operational,
21 customer-based plans involving reliability, response speed, *etc.* Performance plans are
22 financial, company-based plans which track increases to the bottom line, ROE, *etc.* 50%
23 of the "merit" (operational) plan costs are disallowed and 75% of the "performance"
24 (financial) plan costs are disallowed.

²³ See e.g., AEP-PSO Cause Nos. PUD 06-285, PUD 08-144 and PUD 15-208; OG&E Cause No. PUD 05-151; and ONG Cause No. PUD 04-610.

1
2 **Q: HAVE YOU REVIEWED THE APS INCENTIVE PLAN TO DETERMINE THE**
3 **EXTENT TO WHICH IT INCLUDES FINANCIAL PERFORMANCE**
4 **MEASURES?**

5 A: Yes. My analysis of the Company's incentive plan is set forth at Confidential Exhibit
6 MG-1, which provides information regarding the APS incentive plan, including the
7 portion of the plan tied to financial performance measures. My review of the 2014 and
8 2015 plans supports a 50/50 sharing of the plan costs.

9
10 **Q: HOW IS THE YOUR ADJUSTMENT CALCULATED?**

11 A: The adjustment is set forth below and can be seen at *Exhibit MG 2*.

12	Annual Incentive Plan Payments in Pro Forma Expense	\$36,730,959
13	Incentive Sharing Percentage	50%
14	Jurisdictional Percentage (Staff 12-18)	92.4 %
15	ACC Adjustment to Annual Incentive Plans	<u>\$ 16,969,703</u>
16	Payroll Tax Expense Percentage (Staff 12-18)	6.713%
17	Adjustment Incentive Plan --Payroll Taxes	<u>\$ 1,139,176</u>

²⁴ See Final Order in Cause No. PUD 200800144.

IV. REVENUE GROWTH ADJUSTMENT

Q: PLEASE DESCRIBE YOUR PROPOSED ADJUSTMENT FOR A 6-MONTH REVENUE UPDATE FOR LOAD GROWTH.

A: This adjustment updates a vital component of the revenue requirement formula. The three major components of the formula are: (1) investment levels, (2) revenue levels, and (3) expense levels. In this case, APS updated the major plant investment accounts through June 2017, including plant, accumulated depreciation, and accumulated deferred income tax. The Company also updated many of the major expense accounts, including payroll, employee benefits and property taxes. Payroll and benefits were updated to March 2017 projected wage levels for Union employees and March 2016 levels for non-union employees. Property tax expense was updated to 2017 levels. When major rate base components and expense components are adjusted for changes after test year end, revenue levels must be adjusted as well to correctly synchronize the three major components for the revenue requirement formula.

Q: MUST EVERY INVESTMENT, EXPENSE AND REVENUE ACCOUNT BE UPDATED?

A: No. Practically speaking, only those accounts with known and measurable changes of a material amount need to be updated. In the present case, the increase in revenues from load growth is a material change that should be recognized.

Q: HOW DID YOU DETERMINE THE AMOUNT OF LOAD GROWTH TO

1 **RECOGNIZE?**

2 A: In its November 3, 2016 report to investors, the Company reported expected customer
3 growth averaging 2 to 3% annually. On the same page of the presentation the report
4 indicates that weather-normalized retail electric sales volume growth is expected to be
5 about 0.5 to 1.5%. Much of the difference between these two numbers would be the loss
6 of retail sales due to increases in energy efficiency and distributed generation. However,
7 the Company has a continuing Lost Fixed Cost Recovery Mechanism ("LFCR") that
8 recovers much of the lost revenues resulting from energy efficiency and distributed
9 generation initiatives. Thus, the real net growth rate for Company revenues likely lies
10 somewhere between the total expected customer growth of 2-3% and the projected retail
11 sales growth of 0.5-1.5%. To be conservative, I recommend using a growth rate of 1.5%
12 to calculate a post-test year revenue growth adjustment. This revenue growth rate should
13 be applied through June 2017, which is the date to which post-test year plant was
14 updated. A growth rate of 1.5% applied to the Company's 2015 year-end revenues
15 results in an adjustment of \$46.246 million, net of fuel, to the ACC jurisdiction. The
16 calculations for this adjustment are set forth at Exhibit MG-2.

17 **V. DEPRECIATION ADJUSTMENT FOR CHOLLA UNITS 1 AND 3**

18 **Q: WHAT IS THE APS RECOMMENDING FOR CHOLLA UNITS 1 AND 3?**

19 A: After retiring Cholla Unit 2 in 2015 over environmental compliance cost increases, APS
20 is currently assessing the best path for the remaining Cholla units based on economics
 and the changing environmental regulatory landscape. At this point, APS has decided

1 that it will no longer burn coal in Cholla Units 1 and 3 after the mid-2020s but has not yet
2 determined whether the units will be retired or converted to natural gas.²⁵ As a result of
3 this decision, APS has increased its depreciation rates to reflect plant termination dates
4 in 2025, as opposed to the current termination dates in 2028 and 2035 for Units 1 and 3
5 respectively.

6
7 **Q: DO YOU AGREE WITH THIS RECOMMENDATION?**

8 A: No. Many of the coal plants that are being retired to comply with environmental
9 regulations are being retired early, prior to the end of their useful lives, or what their
10 useful lives would have been absent the regulations. Many regulators understand that,
11 for several reasons, current ratepayers should not be forced to pay all of the accelerated
12 costs of early plant retirements required by environmental regulations or environmental
13 policies. The primary reason that future ratepayers should share in the costs of achieving
14 a cleaner, safer environment is that they are the primary beneficiaries of these
15 improvements. Regulators also understand that by spreading some of these costs into the
16 future we give ourselves the opportunity to find ways to offset them with other savings.
17 These savings can come from improved or better technologies, increased operating
18 efficiencies, lower capital costs, load growth, or merely with the passage of time. With
19 the passage of time, rate bases that are currently inflated with other environmental
20 compliance costs have time to subside to more reasonable levels. Thus far, I have yet to
21 hear many good arguments against spreading the higher costs of early plant terminations
22 over some reasonable period into the future.

²⁵ Direct Testimony of James A. Wilde at page 24.

1
2 **Q: CAN NEW TECHNOLOGIES HELP OFFSET THESE PLANT TERMINATION**
3 **COSTS?**

4 A: Yes. If the unavoidable costs of early plant retirements are spread over a reasonable
5 length of time into the future, the lower costs that result from improved technologies
6 typically can help offset those costs. For example, wind energy technology once cost
7 more than \$100/MWH, but now wind contracts are closer to \$25/MWH. Natural gas
8 prices were \$12/MMBtu less than 10 years ago, but now the prices are closer to
9 \$3/MMBtu.²⁶ These dramatic savings have been achieved in large part by improvements
10 in technology. Operating efficiencies can also help lower costs over time. The Bureau
11 of Labor Statistics tracks these efficiency gains each year.²⁷ Typically efficiency gains
12 average more than 1% per year and sometimes more than that in some sectors.²⁸

13
14 **Q: HOW CAN LOWER CAPITAL COSTS HELP OFFSET THE STRANDED**
15 **COSTS RESULTING FROM EARLY PLANT TERMINATION?**

16 A: The cost of both debt and equity is much lower than it was even just a few years ago.
17 The current cost of long-term debt is close to 4%, which is 200 basis point lower than it
18 was just a few years ago and the cost of equity is approaching 9%, which is 100 basis
19 points lower than ROEs typically awarded just a few years ago. These lower capital
20 costs could be used to significantly offset the higher plant-termination costs if the

²⁶ The Henry Hub natural gas spot price was \$3.00/MMBtu on September 19, 2016.

²⁷ Labor productivity is a measure of economic performance that compares the amount of goods and services produced (output) with the number of hours worked to produce those goods and services.

1 termination costs are spread out over time. This offset cannot be accomplished,
2 however, if the cost recovery is accelerated through as shorted recovery period. Where
3 early retirements are anticipated, some commissions are using relatively longer periods
4 to recover plant termination costs. These periods range from 20 to 30-year periods.²⁹
5 These longer recovery periods give regulators an opportunity to avoid implementing the
6 higher rates that would otherwise result from these early retirements to the detriment of
7 ratepayers.

8 Across the county, utilities are facing significant new investments to comply with
9 environmental regulations. On the bright side, these required new investments come at a
10 time when capital costs are very low. The truth is, if commissions set the ROE levels at
11 the real cost of equity and encouraged utilities to finance more of the environmental
12 investments with lower-cost debt, utilities could comply with the environmental
13 regulations or environmental policies without the significant rate increases currently
14 proposed.

15
16 **Q: HOW CAN LOAD GROWTH OFFSET THE PLANT TERMINATION COSTS?**

17 **A:** As load grows over time the fixed costs of the utility, including stranded asset recovery
18 costs, are spread over more kWh sales, bringing the unit cost per customer down over
19 time. Again, this benefit cannot be achieved with accelerated recovery periods.

20

²⁸ Productivity growth for the period 2007-2015 was 1.3% for non-farm labor and 1.8% for the manufacturing sector.

²⁹ See Table 1 below.

1 **Q: PLEASE EXPLAIN HOW THE PASSAGE OF TIME WILL HELP OFFSET THE**
2 **EARLY PLANT TERMINATION COSTS BY ALLOWING THE CURRENTLY**
3 **INFLATED RATE BASES TO SUBSIDE TO MORE REASONABLE LEVELS.**

4 A: Utilities across the country are experiencing increased investment levels to comply with
5 environmental regulations. These abnormally high investment levels resulting from
6 environmental compliance will subside over time as the capital costs are repaid through
7 depreciation recoveries. This pay-down of the higher rate base levels, will take time
8 though. Since one of these environmental compliance costs is the stranded costs that
9 result from early plant retirements, the pay-down of these costs should occur over time
10 as well. This will provide a much smoother transition for ratepayers to get through the
11 over-all cost recovery period for environmental compliance.

12
13 **Q: ARE THERE EXAMPLES FROM OTHER STATES WHERE UTILITIES ARE**
14 **RECOVERING STRANDED COAL PLANT BALANCES OVER**
15 **AMORTIZATION PERIODS THAT EXTEND BEYOND THE EARLY**
16 **RETIREMENT DATE OF THE PLANTS?**

17 A: Yes. There are many such examples. In New Mexico, Public Service Company of New
18 Mexico ("PNM") has agreed to write-off 50% of the stranded costs associated with two
19 coal units retired as part of its environmental compliance plan for Regional Haze.³⁰
20 PNM is a vertically integrated public utility subject to the jurisdiction of the New
21 Mexico commission. One of PNM's coal facilities, the San Juan Generating Station

³⁰ The federal Regional Haze Rule was issued by the U. S. Environmental Protection Agency ("EPA") under the Clean Air Act ("CAA").

1 ("SJGS"), consists of four coal-fired units with 1,683 net megawatts ("MW") of electric
2 generation capacity. PNM's State Implementation Plan ("SIP") sought approval to (a)
3 abandon two coal plants at San Juan Units 2 and 3 and (b) issue Certificates of Public
4 Convenience and Necessity ("CCN") for replacement power resources. As part of the
5 settlement in that case, PNM agreed to write-off 50% of the stranded book value of the
6 plant assets at retirement and place the remaining balance in a regulatory asset account
7 when the plant is retired and recover that balance over a 20-year amortization period.
8 The stipulation language is set forth below:

9 **Undepreciated Investment in Retired Plant**

10 18. PNM shall be allowed to recover 50% of its undepreciated
11 investment in SJGS Units 2 and 3 as shown on its books as of December
12 31, 2017, after reducing the net book value of SJGS Unit 3 by \$26
13 million to reflect the value placed on the additional SJGS Unit 4 capacity.
14 Until that time, PNM shall continue to depreciate SJGS Units 2 and 3
15 according to its approved depreciation schedules. Based on current
16 projections, PNM estimates its undepreciated investment in SJGS Units 2
17 and 3 will be approximately \$257.0 million at December 31, 2017. Based
18 on this estimate, PNM will be allowed to recover 50% of the
19 undepreciated investment estimated at \$115.5 million, which is \$257.0
20 million less \$26.0 million transferred to Unit 4, i.e., \$231.0 million,
21 multiplied by 50% as the percentage of recovery agreed to in this
22 Stipulation. PNM shall place the amount of undepreciated investment
23 allowed to be recovered in a regulatory asset which shall be amortized
24 over a twenty year period with a carrying charge equal to PNM's pretax
25 weighted average cost of capital ("WACC") (as it may be modified from
26 time to time by Commission orders in rate cases) on the unamortized
27 amount.³¹

28 **Q: ARE THERE OTHER EXAMPLES WHERE UTILITIES ARE RECOVERING**
29 **STRANDED COAL PLANT BALANCES OVER LONGER AMORTIZATION**
30 **PERIODS AFTER THE PLANTS ARE RETIRED?**

A: Yes. American Electric Power (“AEP”) retired thirteen coal plants in 2015 in four different states. As shown in Table 1 below, all of these plants had stranded cost balances that were recovered over 25 and 30-year amortization periods. The AEP plants that were retired in 2015, along with their stranded cost balances and amortization periods, are set forth in the table below:

Table 1: AEP Retired Coal Units³²					
AEP Coal Units	Retired	Amortized Through	Amortized Over	State	Balance
Tanner Creek Unit 1	2015	2044	30	Michigan	\$43.401M
Tanner Creek Unit 2	2015	2044	30	Michigan	\$43.401M
Tanner Creek Unit 3	2015	2044	30	Indiana	\$43.401M
Tanner Creek Unit 4	2015	2044	30	Indiana	\$43.401M
Big Sandy Unit 1	2015	2040	25	Kentucky	\$92.491M
Big Sandy Unit 2	2015	2040	25	Kentucky	\$92.491M
Kawona River Units 1-2	2015	2040	25	W Virginia	\$43.924M
Sporn Unit 1	2015	2040	25	W Virginia	\$6.982M
Sporn Unit 3	2015	2040	25	W Virginia	\$6.982M
Glen Lyn Unit 5	2015	2040	25	W Virginia	\$3.703M
Glen Lyn Unit 6	2015	2040	25	W Virginia	\$3.703M
Clinch River Units 1-2	2015	2040	25	W Virginia	\$8.211M
Clinch River Units 3	2015	2040	25	W Virginia	\$56.967M
Total Stranded Costs					\$489.065M

Q: ARE THERE OTHER EXAMPLES?

A: Yes. In its 2015 rate case in Oklahoma, AEP-Public Service Company of Oklahoma (“PSO”) sought approval to retire its two coal units pursuant to a Regional Haze plan.³³

³¹ See Stipulation filed October 1, 2014 I Case No. 13-00390-U at page 6.

³² Provided by AEP-PSO in PSO’s Oklahoma 2015 rate case, Cause No. PUD 201500208, in response to OIEC Data Request 17-2.

1 Under the plan, PSO would retire Northeastern 4 in 2016 and Northeastern 3 in 2026.³⁴
2 PSO sought approval in its rate case application to accelerate the depreciation of both
3 units so that the entire costs of the plants would be recovered by 2026 when the second
4 unit was retired. The request would have increased rates by about \$13M per year.
5 Oklahoma Commission Staff, the Attorney General, the Oklahoma Industrial Energy
6 Consumers ("OIEC") and the Department of Defense ("DOD") all opposed the
7 recommendation. The Administrative Law Judge ("ALJ") in her Report and
8 Recommendations rejected PSO's proposal to increase depreciation rates to recover the
9 entire costs of the plants by the early retirement date in 2026.³⁵

10 [T]he ALJ recommends that the Commission find that PSO should be
11 denied cost recovery for the accelerated depreciation that PSO seeks to
12 recover for Northeastern Units 3 and 4 over the 2016 to 2026 period. To
13 mitigate rate increases, depreciation for the undepreciated, "original"
14 costs of these two units should continue on its current pace to 2040.

15 The Oklahoma Commission accepted the ALJ's recommendation to allow the
16 plant depreciation to continue at its current pace.³⁶

17
18 **Q: ARE THERE OTHER EXAMPLES?**

19 **A:** Yes. In Nevada, in Sierra Pacific's recent rate case filed earlier this year, the
20 parties agreed not to increase rates now to recover accelerated depreciation
21 expense for the early retirement of the Valmy coal plant, scheduled for 2025.
22 Instead the utility will defer the stranded Valmy costs in a regulatory asset for

³³ Cause No. PUD 201500208.

³⁴ Id.

³⁵ Report and Recommendations of the ALJ I Cause No. PUD 201500208 at page 148.

³⁶ See Order No. 657877 in Cause No. PUD 2015000208.

1 amortization into future rates after the plant closes.³⁷

2
3 **Q: WHAT ARE THE ARGUMENTS COMMONLY RAISED BY UTILITIES FOR**
4 **ACCELERATING THE RECOVERY OF EARLY RETIREMENTS?**

5 A: Some utilities argue that the new useful life of the coal plant slated for early retirement is
6 the new retirement date, and depreciation has to be recovered over the useful life of the
7 plant. This argument has no merit. In the situation of an early retirement, the remaining
8 un-depreciated plant balance when the plant is retired (sometimes called stranded costs)
9 is transferred into a regulatory asset account to be recovered over any period of time the
10 regulators deem appropriate. Once the asset balance has been transferred to a regulatory
11 asset account, the depreciation rules no longer apply.

12 Another concern occasionally raised is that delaying recovery of stranded costs
13 into future periods may allow these costs to be avoided by customers leaving the utility
14 system, especially large commercial and industrial customers. For those concerned
15 about customers leaving the system, however, it is important to acknowledge that one of
16 the important factors in a large customer's decision to relocate its facilities is the need to
17 access lower manufacturing and operating costs. Accelerating recovery of stranded plant
18 costs will only exacerbate the problem by causing even higher prices on the utility
19 system and could provide further incentive for these customers to leave.

20 In my opinion, the Company's proposal for accelerating recovery of these costs is
21 premature, especially because the Company has not finalized its plans for the Cholla 1
22 and plants. Moreover, as discussed above, alternative mechanisms exist that enable the

³⁷ Stipulation of the parties filed in Docket No. 16-06006.

1 Commission to deal with any *potential* future stranded costs in a reasonable manner that
2 avoids placing an unnecessary burden on ratepayers.
3

4 **Q: HOW WOULD THE ACCOUNTING WORK UNDER YOUR PROPOSAL?**

5 A: If APS continues to use the current depreciation rates for depreciation expense, the result
6 will be that the entire plant balance will not be collected before 2025. If, in fact, the
7 Company decides to retire the plants in 2025, a stranded asset balance will remain on the
8 books when the plant closes. My recommendation is that the stranded asset balance that
9 exists in 2025 would be transferred to a regulatory asset account at that time for
10 collection in future rates, over whatever period the Commission chooses.

VI. FAIR VALUE RATE BASE ADJUSTMENT

11 **Q: WHAT IS APS PROPOSING WITH RESPECT TO ITS FAIR VALUE**
12 **ADJUSTMENT?**

13 A: APS is proposing to increase rates by \$51 million for a "fair value" rate base adder in
14 this case. The fair value adder is discussed in the testimony of APS witness Bente
15 Villadsen. At page 57 of her direct testimony, she testifies that the state Constitution
16 requires Commission to determine the fair value of the property APS uses in the state of
17 Arizona in connection with setting rates. According to the Arizona Constitution at
18 Article 15, Section 14,

19 The corporation commission shall, to aid it in the proper discharge of its
20 duties, ascertain the fair value of the property within the state of every
21 public service corporation doing business therein; and every public
22 service corporation doing business within the state shall furnish to the
23 commission all evidence in its possession, and all assistance in its power,

1 requested by the commission in aid of the determination of the value of
2 the property within the state of such public service corporation.

3 Based on this provision, Dr. Villadsen testifies that the state Constitution requires the
4 Commission to determine the fair value of the property APS uses in connection with
5 setting rates. From this conclusion, Ms. Villadsen opines that the Company's approach,
6 which results in a "fair value" adder of the 1%, is "not unreasonable." The 1%
7 incremental return on the fair value as calculated by APS witness, Leland Snook, results
8 in a \$51M increase in the revenue requirement. Mr. Snook testifies that the Commission
9 has accepted this approach in the past.³⁸

10
11 **Q: DO YOU BELIEVE A FAIR VALUE INCREMENTAL ADJUSTMENT IS**
12 **NECESSARY TO COMPLY WITH THE ARIZONA CONSTITUTION?**

13 A: No. In my opinion, an appropriately calculated cost of capital return on the original cost
14 rate base of the Company already provides a reasonable return on the "fair value" of
15 APS's utility assets. As I explain further below, neither the Arizona Constitution, nor
16 the Arizona courts, explicitly require the Commission utilize a two-tiered incremental
17 methodology with a fair value adder, as proposed by APS. The Company's
18 interpretation of the phrase, "ascertain the fair value of the property within the state"
19 reflects an outdated, minority view as to the meaning of this constitutional language.
20 States across the country have rejected the view that an incremental "fair value" adder is
21 required, or even appropriate, to "ascertain the fair value" of utility property for purposes
22 of setting just and reasonable rates.

³⁸ Direct Testimony of Leland Snook at page 33.

1
2 **Q: WHY DO YOU DISAGREE WITH THE COMPANY'S VIEW THAT THE**
3 **CONSTITUTION REQUIRES A "FAIR VALUE" ADDER APPROACH IN**
4 **ORDER TO SET JUST AND REASONABLE RATES?**

5 A: I believe the constitutional language simply does not require such an approach. The
6 Arizona Supreme Court has made it very clear that the Commission "has full and
7 exclusive power" in setting just and reasonable rates for public utilities, stating,

8 [I]n the matter of prescribing classifications, rates, and charges of public
9 service corporations and in making rules, regulations, and orders
10 concerning such classifications, rates, and charges by which public
11 service corporations are to be governed, the Corporation Commission has
12 full and exclusive power. In such field the Commission is supreme and
13 such exclusive field may not be invaded by the courts, the legislature, or
14 the executive.³⁹

15 The court also has made it clear that no particular formula is required for ascertaining
16 fair value. Specifically, the court states "the constitution does not establish a formula for
17 arriving at fair value and we have never prescribed one."⁴⁰ The method for determining
18 fair value, then, falls within the Commission's discretion, and the courts will uphold a
19 fair value determination unless it is arbitrary and unfair at the time it is made.⁴¹ Thus,
20 the Commission is free to determine whether the widely-rejected fair value "adder"
21 approach remains necessary, or appropriate, in today's regulatory environment.
22

³⁹ See *RUCO v. Arizona Corp. Commission*, No. CV 15-0281-PR, filed August 8, 2016, at ¶12.

⁴⁰ *Id.* at ¶15.

⁴¹ *Id.*

1 **Q: WHY DO YOU BELIEVE A RETURN ON THE ORIGINAL COST RATE BASE**
2 **ACTUALLY DOES PROVIDE A JUST AND REASONABLE RETURN ON THE**
3 **'FAIR VALUE' OF THE UTILITY'S ASSETS?**

4 **A:** The meaning of the term "fair value," as it is used in ratemaking has evolved
5 significantly over time. The Company's interpretation of how the Commission should
6 determine "fair value" is no longer the accepted standard in the vast majority of
7 jurisdictions. It is important to consider the events that led to this change. In what is
8 regarded as the first historically significant ratemaking case, *Smyth v. Ames*,⁴² the United
9 States Supreme Court reviewed the constitutionality of a Nebraska statute regulating the
10 rates charged by railroads in that state. The question before the Court was whether the
11 statute constituted a "taking" of private property for public use thus depriving the carrier
12 of its rights to "due process" and "equal protection" under the Fourteenth Amendment of
13 the Constitution of the United States. In this 1898 decision, the Court established that
14 utility rates must be based upon the "fair value" of the private property employed for
15 public use. The Court said:

16 We hold, however, that the basis of all calculations as to the
17 reasonableness of rates to be charged by a corporation maintaining a
18 highway under legislative sanction must be the fair value of the property
19 being used by it for the convenience of the public. And, in order to
20 ascertain that value, the original cost of construction, the amount
21 expended in permanent improvements, the amount and market value of its
22 bonds and stock, the present as compared with the original cost of
23 construction, the probable earning capacity of the property under
24 particular rates prescribed by statute, and the sum required to meet
25 operating expenses, are all matters for consideration, and are to be given
26 such weight as may be just and right in each case. We do not say that
27 there may not be other matters to be regarded in estimating the value of
28 the property. (Emphasis added).

⁴² *Smyth v. Ames*, 169 U.S. 466 (1898).

1 Thus, *Smyth v. Ames* established the so-called "fair value" rule for utility ratemaking that
2 became the law of the land in 1898, and this approach remained the standard for the next
3 fifty years or so. Under the "fair value" rule, as originally established, rates were to be
4 set based upon the "costs" associated with providing utility service.

5 After the "fair value" rule was established in *Smyth v. Ames*, controversy
6 eventually developed over how to calculate the "fair value" of a utility when that phrase
7 was interpreted to mean "replacement cost" rather than "net book value" or original cost.
8 Justice Brandeis addressed the growing controversy in 1922 in his dissenting opinion in
9 *Missouri ex. Rel. Southwestern Bell Tele. Co. v. PSC of Missouri*. His famous and often
10 quoted words came to be known as the "prudent investment" rule.

11 The so-called rule of *Smyth v. Ames* is, in my opinion, legally and
12 economically unsound. The thing devoted by the investor to the public
13 use is not specific property, tangible and intangible, but capital embarked
14 in the enterprise. Upon the capital so invested the federal Constitution
15 guarantees to the utility the opportunity to earn a fair return. When the
16 financing has been proper, the cost to the utility of the capital, required to
17 construct equip and operate its plant should measure the rate of return
18 which the Constitution guarantees opportunity to earn.

19 The "prudent investment rule, like the "fair value" rule sets rates based on cost. The only
20 difference is that replacement costs are not a factor for consideration under the "prudent
21 investment" rule which looks only at original costs, or net book value, instead. The
22 "prudent investment" rule eventually displaced the "fair value" rule after the Court's
23 landmark 1944 decision, *FPC v. Hope Natural Gas Co.*⁴³ In *Hope*, the Court abandoned

⁴³ *FPC v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

1 "fair value" as the exclusive ratemaking methodology and ruled that historical cost was a
2 valid basis on which to calculate utility compensation. In *Hope*, the Court said:

3 Rates which enable the company to operate successfully, to maintain its
4 financial integrity, to attract capital, and to compensate its investors for
5 the risks assumed certainly cannot be condemned as invalid, even though
6 they might produce only a meager return on the so-called 'fair value' rate
7 base.⁴⁴

8 After the *Hope* case, a gradual shift away from the "fair value" approach occurred.
9 While the holding in *Hope* taught that it was the end result, and not one particular
10 ratemaking methodology, that measured the constitutionality of regulated rates, the
11 Court made it clear that the one formula that does *not* run afoul of the Fifth and
12 Fourteenth Amendments is the "prudent investment" methodology, in which the utility is
13 allowed the opportunity to earn a reasonable return on its *net invested capital*. Thus,
14 the historical-cost based approach began to take hold as the appropriate basis on
15 which to calculate a regulated utility's return, and is now followed almost
16 exclusively in every jurisdiction.

17 In fact, a NARUC publication in 1992 reported that almost every state today is an
18 original cost (historical cost) jurisdiction. The report notes only four exceptions,
19 Arizona, Indiana, Maryland and New Mexico. Since then, it is my understanding that
20 Indiana, Maryland and New Mexico have all effectively become original cost

⁴⁴ *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944).

1 jurisdictions. To my knowledge, only Arizona still follows the "fair value" rule to any
2 significant degree.⁴⁵

3
4 **Q: IS THE PRUDENT INVESTMENT RULE STILL VALID TODAY?**

5 A: Yes. In 1989, the Court reaffirmed the *Hope* decision in *Duquesne Light Co. v. Baracsh*:

6 Forty-five years ago in the landmark case of *FPC v. Hope Natural Gas*
7 *Co.*, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944), this Court
8 abandoned the rule of *Smyth v. Ames*, and held that the "fair value"
9 rule is not the only constitutionally acceptable method of fixing utility
10 rates. In *Hope* we ruled that historical cost was a valid basis on which
11 to calculate utility compensation. 320 U.S., at 605, 64 S.Ct., at 289
12 ("Rates which enable [a] company to operate successfully, to
13 maintain its financial integrity, to attract capital, and to compensate
14 its investors for the risk assumed certainly cannot be condemned as
15 invalid, even though they might produce only a meager return on the so
16 called 'fair value' rate base").⁴⁶

17 **Q: DOES ANY FEDERAL JURISDICTION OR AGENCY STILL USE A FAIR**
18 **VALUE METHODOLOGY?**

19 A: No. All of the federal agencies converted to the prudent investment rule long ago.
20 When the oil pipeline industry tried to revive the fair value methodology in 1978, relying
21 on the Valuation Act of 1913, the DC Circuit Court rejected the methodology.⁴⁷

22 The product of a bygone era of ratemaking ushered in by the Supreme
23 Court in *Smyth v. Ames* in 1898 and ushered out by that same body in
24 *Hope Natural Gas* in 1944.

⁴⁵ It appears Indiana's shift to original cost rate base has retained some superficial vestiges of the fair value methodology, however, these appear to have no economic impact. In other words, although Indiana still calculates a "fair value" rate base, along with its net original cost rate base, it lowers the rate of return on its fair value rate base in order to yield a result identical to the original cost return. Thus, there is no "adder" mechanism that has a significant financial impact on rates, as is proposed by APS in this case.

⁴⁶ *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 310 (1989).

⁴⁷ *Farmers Union Cent. Exch. V. F.E.R.C.*, 584 F.2d 408, 418 (D.C.Cir. 1978), cert denied, 439 U.S. 995 (1978).

1 **Q: IS THE FACT THAT THE ARIZONA CONSTITUTION REQUIRES THE**
2 **COMMISSION TO ASCERTAIN THE “FAIR VALUE” UNUSUAL OR**
3 **COMPELLING?**

4 A: No. Before the *Hope* decision, virtually every state followed the “fair value” approach,
5 as did the federal agencies. In his *Process of Ratemaking* treatise, Leonard Saul
6 Goodman discusses 24 states in which “the controversy was most marked.” Most of
7 these jurisdictions had, or still have, language in their constitutions, statutes or court
8 decisions that require a determination of the “fair value” of utility property in setting
9 rates. To my knowledge, all of these jurisdictions now effectively set rates based on
10 original cost.

11
12 **Q: HOW DID THE CONTROVERSY DEVELOP OVER THE FAIR VALUE RULE?**

13 A: It is important to recognize that in 1898, when the *Smyth v. Ames* court used the term
14 “fair value,” the historical-cost based financial statements, as required by modern-day
15 *Generally Accepted Accounting Principles* (“GAAP”), did not exist. It was not until the
16 mid-1930s, in response to the stock market crash of 1929, that uniform accounting
17 principles, and uniform financial statements based on GAAP were developed. One of
18 the original *generally accepted accounting principles* (still in effect today) is that assets
19 must be recorded in the financial statements at original, historical cost, less accumulated
20 depreciation. It was the creation of uniform financial statements (based on historical
21 cost) in the 1930s that led the Supreme Court in 1944 to move away from the subjective,

1 hard to quantify "fair value" rule toward the more objective, more reliable, prudent
2 investment rule, which is based on net original cost (i.e., historical cost).
3

4 **Q: ARE THERE OTHER REASONS WHY A PROPERLY CALCULATED**
5 **RETURN ON A "FAIR VALUE" RATE BASE WILL YIELD THE SAME**
6 **RESULT AS A PROPERLY CALCULATED RETURN ON THE COMPANY'S**
7 **ACTUAL ORIGINAL COST RATE BASE?**

8 A: Yes. For ratemaking purposes, ratepayers pay no more than the original cost of the
9 utility assets even if the assets are sold to another utility at a premium. The general rule
10 followed at FERC and most state commissions is that acquisition premiums are not
11 allowed in rates. This means that even if APS were acquired by another utility, even at
12 the significant (unsupported) premium level in Ms. Valledsen's testimony, APS
13 ratepayers would continue to pay rates based in the net original cost book value of the
14 APS assets. Any acquisition premium paid by the acquiring company would not be
15 allowed in rates.

16 This begs the very important question: if ratepayers would not be required to pay
17 any above-book premium in the event APS were actually sold to another company, why
18 are they being forced to pre-pay this same theoretical premium now, even before any
19 such sale takes place? In other words, why are ratepayers being forced to pay now what
20 they wouldn't be forced to pay later, if the Company were actually sold at a price higher
21 than book value.
22

1 **Q: DO YOU AGREE WITH DR. VILLADSEN THAT RECENT MERGERS AND**
2 **ACQUISITIONS IN THE UTILITY INDUSTRY SUPPORT THE COMPANY'S**
3 **FAIR VALUE RATE BASE CALCULATION?**

4 A: No. The Company's fair value approach is not only extremely subjective and unfair, it is
5 also wholly inconsistent with the regulatory treatment of most mergers and acquisitions
6 in the regulatory industry. As discussed above, acquisition premiums *actually paid* in
7 utility mergers and acquisitions are *not* allowed in rates. In her Attachment BV-5DR,
8 Ms. Villadsen lists six electric utility sales over the past 2-year period where the utility
9 assets were sold at a premium. She uses these sales to support the Company's
10 determination of its "fair value" rate base. I am familiar with three of these acquisitions:
11 Empire District Electric, TECO Energy and NV Energy. In each of these mergers, *none*
12 of the acquisition premium is being recovered in rates. So, it is inappropriate to use
13 these acquisition premiums to suggest that APS ratepayers should be paying higher rates
14 now for an acquisition premium they would never have to pay later, even if APS were
15 eventually sold at a premium.

16
17 **Q: ARE THERE ANY OTHER REASONS WHY THE AMOUNT OF THE RETURN**
18 **ON A "FAIR VALUE" RATE BASE SHOULD BE THE SAME AS THE**
19 **AMOUNT OF THE RETURN ON THE ORIGINAL COST RATE BASE?**

20 A: Yes. The companies in the proxy group of companies used by Ms. Villadsen, and all of
21 the other cost of capital witnesses, are all original cost companies – because they are all
22 required to follow GAAP and present their financial statements based on historical,

1 original cost. Thus, the overall cost of capital calculated for APS and the other cost of
2 capital witnesses, based on a proxy group of comparable companies, is the final
3 answer.⁴⁸ If the Commission provides a separate calculation for APS's "fair value" rate
4 base, then the *rate* of return on the fair value rate base needs to be adjusted so that the
5 final allowed return, in dollars, is the same under the fair value scenario as it is under the
6 original cost approach. In other words, the *rate of return* on the higher fair value rate
7 base should be adjusted lower so that the ultimate return allowed is the same under either
8 approach.

9
10 **Q: WHAT DO YOU RECOMMEND?**

11 A: In my opinion, it is inappropriate to arbitrarily impose a fair value "addor," which
12 increases rates by \$51 million, based on nothing more than mere speculation that the
13 Company's assets are probably "worth more" than their historical cost. The arbitrary
14 and speculative nature of such calculations has led the other jurisdictions to recognize
15 that the historical cost method alone is the appropriate measure of the "fair value" of
16 utility property, and therefore reject mechanisms such as the proposed 1% adder which
17 artificially inflates rates. For these reasons, I recommend the Commission remove the
18 Company's proposed 1% fair value adjustment. Instead, the Commission should adjust
19 the *rate of return* on the fair value rate base to produce a result identical to the return
20 allowed on the original cost rate base.

⁴⁸ See, for example, Professor Bonbright's strong opposition to fair value valuation that effectively seeks to compensate shareholders twice for the effects of inflation already included in the utility's return, which is discussed in Leonard Saul Goodman's *The Process of Ratemaking* at pages 771-772.

VII. EEI DUES ADJUSTMENT

Q: WHAT IS THE COMPANY REQUESTING WITH RESPECT TO EDISON ELECTRIC INSTITUTE ("EEI") DUES?

A: APS is seeking to include \$946,663 for EEI dues in rates. This is the amount of expense that remains in pro forma operating expense after APS removed \$211,748 for lobbying expense and \$30,000 for donations from total EEI test year expense of \$1,188,411.⁴⁹

Q: DO YOU AGREE WITH THE COMPANY'S REQUEST?

A: No. EEI is an institute that represents the interests of regulated utilities such as APS, often times in direct opposition to the interests of ratepayers. Moreover, membership to EEI is voluntary; as a result, these dues do not represent *necessary* costs of providing electric service.

Q: HOW HAS THE COMMISSION TREATED THESE DUES IN THE PAST?

A: In prior decisions, the Commission disallowed 49.93% of the EEI dues related to legislative advocacy, regulatory advocacy, advertising, marketing and public relations.⁵⁰ Thus, the Company's elimination of only the legislative advocacy expenses is insufficient to comply with prior commission orders. In my opinion, at least half of the EEI dues should be eliminated.

Q: WHAT ADJUSTMENT ARE YOU PROPOSING?

⁴⁹ See Prefiled 1.54.

⁵⁰ See, Decision Nos. 71914 and 70860.

1 A: I am proposing to eliminate at least 50% of the test year EEI dues expense based on prior
2 Commission orders. If the Company cannot show in rebuttal testimony why the
3 remaining 50% benefits customers more than the Company, then I would recommend
4 elimination of the total amount.

5
6 **Q: HOW IS YOUR ADJUSTMENT CALCULATED?**

7 A: My adjustment is calculated in the table below and is set forth at Exhibit MG2.3.

<u>Adjustment to Exclude 50% of EEI Dues</u>	
EEI Dues Included in Test Year Expense	\$1,188,411
Exclude 50% Based on Prior Orders	(594,205)
Amount already Excluded	<u>241,748</u>
Adjustment to Exclude 50% of EEI Dues	\$(352,457)

VIII. APS REQUESTED COST DEFERRAL MECHANISMS

8 **Q: WHAT IS THE COMPANY REQUESTING WITH REGARD TO COST**
9 **DEFERRAL MECHANISMS?**

10 A: APS is requesting deferred accounting for three significant cost items: (1) the Ocotillo
11 Modernization Project, (2) the Four Corners selective catalytic reduction ("SCR")
12 project, and (3) future property taxes increases associated with these and other projects.
13 The Ocotillo modernization project will replace 220MWs of existing steam units with
14 510MWs of new combustion turbines. Two of the 5 new Ocotillo units will go into
15 service in late 2018 and the remaining 3 units will go into service in the spring of 2019.
16 The project is estimated to cost about \$500 million. The Company seeks to defer the

1 future recovery of these costs to the Company's next rate case. Without this deferral, the
2 Company would have to file a rate case sooner than it would like.

3 The Four Corners SCR project will cost about \$400 million. The SCR at Four
4 Corners Unit 5 will go into service in late 2017 and the SCR at Four Corners Unit 4 will
5 go into service in the spring of 2018. The Company seeks to defer recovery of these
6 project costs and then have a step increase in rates in January 2019. Without this special
7 ratemaking treatment, the Company would have to file a rate case after the projects are
8 completed sometime in the middle of 2018 – assuming the Company was earning an
9 insufficient return at the time.

10
11 **Q: DO YOU AGREE WITH THE COMPANY'S PROPOSED DEFERRAL AND**
12 **STEP INCREASE MECHANISMS?**

13 **A:** No. In this rate case, the Company is already going out 18 months beyond the test year
14 to pick up asset additions through June, 2017. This, on its own, is extraordinary rate
15 relief. With the additional cost deferral mechanism, the Company would be reaching
16 nearly 30 months beyond the test year to pick up cost increases for planned asset
17 additions without recognizing the offsetting cost decreases that could occur for
18 ratepayers over the same period of time. These offsetting cost decreases would include
19 among other things (1) significant decreases in rate base associated with depreciation
20 expense recoveries, (2) significant decreases in rate base from additional ADIT, (3)
21 significant increases in revenues from load growth, (4) decreases in expenses from
22 operating efficiencies and (5) significant cost of capital decreases, if the Company were

1 to able fund these asset additions with more debt than equity. Even if the Company were
2 willing to recognize the accumulated depreciation, ADIT, load growth, operating
3 efficiencies and cost of capital savings directly associated with these asset additions, that
4 would not address the overall cost savings from these items on a company-wide basis.

5 For example, looking at the accumulated depreciation item on its own, the
6 Company collects approximately \$500M per year for depreciation and amortization
7 expense, which causes a corresponding decrease in rate base by that amount each year.
8 So, for the years 2017 through 2019, when the Ocotillo modernization (\$500M) and the
9 Four Corners SCR (\$400M) projects will be going into service, rate base will naturally
10 be declining by \$1,500M for depreciation recoveries, which will more than offset the
11 \$900M increase from these projects that the Company wants to defer and collect later.
12 The bottom line is that the Company has not shown that these projects will cause a
13 significant under-earnings situation without the extraordinary rate treatment it proposes.
14

15 **Q: WHY IS THIS IMPORTANT?**

16 A: Generally, for a utility to implement extraordinary rate relief such as a rider, cost tracker,
17 or deferred accounting mechanism, as the Company seeks here, the utility would need to
18 show that it is facing significant cost increases, that are outside the control of
19 management, that will cause significant financial harm to the utility without special rate
20 relief beyond the traditional rate case approach. APS has made no such showing. Even
21 on the first point – that the utility is facing significant cost increases – the Company has
22 not shown that these two projects will result in a net increase in costs sufficient to cause

1 financial harm. In fact, it appears that depreciation recoveries alone will more than
2 offset the costs of these two projects.
3

4 **Q: WHAT DO YOU RECOMMEND?**

5 A: I believe APS has made none of the requisite showings in needs to make to justify the
6 extraordinary rate relief it seeks. As a result, I recommend that the Commission not
7 approve the cost deferral and rate step mechanisms requested by the Company.

XI. ADJUSTMENTS PROPOSED BY OTHER EFCA WITNESSES

8 **Q: PLEASE IDENTIFY ISSUES SPONSORED BY OTHER EFCA WITNESS.**

9 A: Mr. David Garrett provides testimony on depreciation and cost of capital issues. The
10 impacts of his adjustments are set forth in Exhibit MG-2.

11 **X. CONCLUSION**

12 **Q: DO YOU HAVE ANY FURTHER COMMENTS?**

13 A: Yes. My testimony does not address every potential issue. The fact that I do not express
14 an opinion on a particular issue is not to be interpreted as agreement with the Company's
15 position on that issue. My testimony and recommendations should be considered in
16 conjunction with the testimony and recommendations of Staff, RUCO and the other
17 interveners.
18

19 **Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

20 A: Yes, it does.

MARK E. GARRETT

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EDUCATION:

Juris Doctor Degree, With Honors, Oklahoma City University Law School, 1997
Post Graduate Hours in Accounting, Finance and Economics, 1984-85:
University of Texas at Arlington; University of Texas at Pan American;
Stephen F. Austin State University
Bachelor of Arts Degree, University of Oklahoma, 1978

CREDENTIALS:

Member Oklahoma Bar Association, 1997, License No. 017629
Certified Public Accountant in Oklahoma, 1992, Certificate No. 11707-R
Certified Public Accountant in Texas, 1986, Certificate No. 48514

WORK HISTORY:

GARRETT GROUP, LLC – Regulatory Consulting Practice (1996 - Present) Participates as a consultant and expert witness in electric utility, natural gas distribution company, and natural gas pipeline matters before regulatory agencies making recommendations related to cost-based rates. Reviews management decisions of regulated utility companies for reasonableness from a ratemaking perspective especially regarding the reasonableness of prices paid for natural gas supplies and transportation, coal supplies and transportation, purchased power and renewable energy projects. Participates in gas gathering, gas transportation, gas contract and royalty valuation disputes to determine pricing and damage calculations and to make recommendations concerning the reasonableness of charges to royalty and working interest owners and other interested parties. Participates in regulatory proceedings to restructure the electric and natural gas utility industries. Participates as an Instructor at NMSU Center for Public Utilities and as a Speaker at NARUC Staff Subcommittee on Accounting and Finance.

OKLAHOMA CORPORATION COMMISSION – Aide to Commissioner Bob Anthony (1995)

OKLAHOMA CORPORATION COMMISSION - Coordinator of Accounting and Financial Analysis (1991 - 1994) Planned and supervised the audits of major public utility companies doing business Oklahoma for the purpose of determining revenue requirements. Presented both oral and written testimony as an expert witness for Staff in defense of numerous accounting and financial recommendations related to cost-of-service based rates. Audit work and testimony covered all areas of rate base and operating expense. Supervised, trained and reviewed the audit work of numerous Staff CPAs and auditors. Promoted from Supervisor of Audits to Coordinator in 1992.

FREEDOM FINANCIAL CORPORATION - Controller (1987 - 1990) Responsible for all financial reporting including monthly and annual financial statements, cash flow statements, budget reports, long-term financial planning, tax planning and personnel development. Managed the General Ledger and Accounts Payable departments and supervised a staff of seven CPAs and accountants. Reviewed all subsidiary state and federal tax returns and facilitated the annual independent financial audit and all state or federal tax audits. Received promotion from Assistant Controller in September 1988.

SHELBY, RUCKSDASHEL & JONES, CPAs - Auditor (1986 - 1987) Audited the financial statements of businesses in the state of Texas, with an emphasis in financial institutions.

Previous Experience Related to Cost-of-Service, Rate Design, Pricing and Energy-Related Issues

1. **Caesars Enterprise Service, LLC, 2016 (704B Exit Application)** – Participating as an expert witness on behalf of Caesars before the Nevada PUC. Sponsoring written and oral testimony in Caesar’s application to purchase energy and capacity from a provider other than Nevada Power.
2. **Southwestern Electric Power Company, 2016 (PUC Docket No. 46449)** – Participating as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s general rate case proceeding to provide testimony on various cost of service issues and on the utility’s revenue requirement.
3. **CenterPoint Texas, 2016 (Docket No. 10567)** – Participating as an expert witness on behalf of City of Houston before the Texas Railroad Commission in CenterPoint’s general rate case application, sponsoring testimony to address the utility’s overall revenue requirement and various rate design proposals.
4. **Entergy Texas, Inc., 2016 (Docket No. 46357)** – Participating as an expert witness on behalf Cities Served by Applicant before the Texas PUC in ETI’s application to amend its Transmission Cost Recovery Factor.
5. **Anchorage Municipal Light and Power, 2016 (Docket No. U-16-060)** – Participating as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on the ratemaking treatment of ML&P’s acquired interest in the Beluga River Unit gas field with ratepayer funds.
6. **Arizona Public Service Company, 2016 (Docket No. E-01345A-16-0036)** – Participating as an expert witness before the Arizona Corporation Commission in APS’s General Rate Case application, on behalf of Energy Freedom Coalition of America to provide written and oral testimony to address the various revenue requirement issues.
7. **Oklahoma Gas & Electric Co. (Arkansas), 2016 (Docket No. 16-052-U)** – Participating as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”)¹ before the Arkansas Public Service Commission in OG&E’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
8. **Sierra Pacific Power Company, 2016 (Docket No. 16-06006)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers² before the Nevada PUC in SPPC’s general rate case proceeding. Sponsored testimony on various revenue requirement, depreciation, and rate design issues.
9. **Tucson Electric Power, 2016 (Docket No. E-01933A-15-0322)** – Participating as an expert witness before the Arizona Corporation Commission in TEP’s General Rate Case application, on behalf of Energy Freedom Coalition of America providing written and oral testimony to address the utility’s cost of service study and rate design proposals.
10. **Texas Gas Service, 2016 (Docket No. 10506)** – Participating as an expert witness on behalf of El Paso before the Texas Railroad Commission in TGS’s General Rate Case application, sponsoring

¹ ARVEC is an association of industrial manufacturing facilities in northwest Arkansas.

² The Northern Nevada Utility Consumers is a group of large commercial and industrial customers in the SPPC service territory.

testimony to address the utility's overall revenue requirement and various rate design proposals.

11. **Texas Gas Service, 2016 (Docket No. 10488)** – Participating as an expert witness on behalf of South Jefferson County Service Area (“SJCSA”) before the Texas Railroad Commission in TGS’s General Rate Case application, sponsoring testimony to address the utility’s overall revenue requirement and various rate design proposals.
12. **Oklahoma Gas and Electric Company, 2016 (Cause No. PUD 201500273)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s General Rate Case application. Sponsoring testimony to address the utility’s overall revenue requirement and rate design proposals.
13. **Oklahoma Gas & Electric Company, 2016 (Cause No. PUD 201500273)** – Participated as an expert witness on behalf of The Alliance for Solar Choice (“TASC”) before the Oklahoma Corporation Commission to address OG&E’s proposed Distributed Generation (“DG”) rates for solar DG customers.
14. **Anchorage Municipal Light and Power, 2016 (Docket No. U-13-097)** – Participated as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on rates and tariffs proposed for customer-owned combined heat and power plant generation.
15. **Oklahoma Natural Gas Company, 2015 (Cause No. PUD 201500213)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission in ONG’s General Rate Case application. Sponsored testimony to address the utility’s overall revenue requirement and rate design proposals.
16. **Oklahoma Gas & Electric Company, 2015 (Cause No. PUD 201500274)** – Participated as an expert witness on behalf of The Alliance for Solar Choice (“TASC”) before the Oklahoma Corporation Commission to address OG&E’s proposed Distributed Generation (“DG”) rates for solar DG customers.
17. **Nevada Power Company, 2015 (Docket No. 15-07004)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”)³ before the Nevada PUC. Sponsoring written and oral testimony in NPC’s 2015 Integrated Resource Plan to provide analysis of the On Line transmission line allocation, the Siverhawk plant acquisition, and the Griffith contract termination.
18. **Oklahoma Gas & Electric Company, 2015 (Docket No. 15-034-U)** – Participated as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”)⁴ before the Arkansas Public Service Commission in OG&E’s Act 310 application to implement a rider to recover environmental compliance costs.
19. **MGM Resorts, LLC, 2015 (Docket No. 15-05017)** – Participating as an expert witness on behalf of the MGM Resorts, LLC before the Nevada PUC. Sponsoring written and oral testimony in MGM’s application to purchase energy and capacity from a provider other than Nevada Power.
20. **Entergy Arkansas, 2015 (Docket No. 15-015-U)** – Participating as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University

³ The Southern Nevada Hotel Group is comprised of Boyd Gaming, Caesars Entertainment, MGM Resorts, Station Casinos, Venetian Casino Resort, and Wynn Las Vegas.

⁴ ARVEC is an association of industrial manufacturing facilities in northwest Arkansas.

of Arkansas and several hospitals before the Arkansas PSC in Entergy's general rate case to provide testimony on various revenue requirement issues.

21. **Public Service Company of Oklahoma, 2015 (Cause No. PUD 201500208)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO's general rate case application to provide testimony on various cost-of-service issues and on the utility's overall revenue requirement and rate design proposals.
22. **Nevada Power Company, 2014 (Docket No. 14-05003)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group ("SNHG") before the Nevada PUC. Sponsored written and oral testimony in NPC environmental compliance case, called the Emissions Reduction and Capacity Replacement case. The main focus of our testimony was our recommendation to eliminate the \$438M Moapa solar project from the compliance plan.
23. **Nevada Power Company, 2014 (Docket No. 14-05004)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC to sponsor written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
24. **Oklahoma Gas and Electric Co., 2014 (Cause No. PUD 201400229)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers ("OIEC")⁵ in OG&E's Environmental Compliance and Mustang Modernization Plan before the Oklahoma Corporation Commission to provide testimony addressing the economics and rate impacts of the plan.
25. **Sourcegas Arkansas, Inc., 2014 (Docket No. 13-079-U)** Participated as an expert witness on behalf of the Hospital and Higher Education Group ("HHEG"), an intervenor group that includes the University of Arkansas and several hospitals before the Arkansas PSC in SGA's general rate case to provide testimony on various revenue requirement issues.
26. **Anchorage Municipal Light and Power, 2014 (Docket No. U-13-184)** – Participating as an expert witness before the Alaska Regulatory Utility Commission on behalf of Providence Health and Services to provide testimony on various revenue requirement and cost of service issues.
27. **Public Service Company of Oklahoma, 2014 (Cause No. PUD 201300217)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO's general rate case application to provide testimony on various cost-of-service issues and on the utility's overall revenue requirement and rate design proposals.
28. **Entergy Texas Inc., 2013 (PUC Docket No. 41791)** – Participating as an expert witness on behalf of the Cities⁶ in ETI's general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.
29. **MidAmerican/NV Energy Merger, 2013 (Docket No. 13-07021)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group ("SNHG") before the Nevada PUC. Sponsored testimony to address various issues raised in the proposed acquisition of NV Energy by MidAmerican Energy Holdings Company, including capital structure and acquisition premium recovery issues.
30. **Entergy Arkansas, 2013 (Docket No. 13-028-U)** – Participated as an expert witness on behalf of the

⁵ OIEC is an association of approximately 25 large commercial and industrial customers in Oklahoma.

⁶ The Cities include Beaumont, Conroe, Groves, Houston, Huntsville, Orange, Navasota, Nederland, Pine Forest, Pinehurst, Port Arthur, Port Neches, Rose City, Shenandoah, Silsbee, Sour Lake, Vidor, and West Orange.

Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in Entergy’s general rate case to provide testimony on various revenue requirement issues.

31. **Sierra Pacific Power Company, 2013 (Docket No. 13-06002)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers⁷ before the Nevada PUC in SPPC’s general rate case proceeding to provide testimony on various cost of service and revenue requirement issues. Sponsored written and oral testimony in the depreciation phase, the revenue requirement phase and the rate design phase of these proceedings.
32. **Gulf Power Company, 2013 (Docket No. 130140-EI)** – Participated as an expert witness on behalf of the Office of Public Counsel before the Florida Commission in Gulf Power’s general rate case proceeding to provide testimony on various revenue requirement issues.
33. **Public Service Company of Oklahoma, 2013 (Cause No. PUD 201200054)** – Participating as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission (“OCC”) to provide testimony in PSO’s application seeking Commission approval of its settlement agreement with EPA.
34. **Southwestern Electric Power Company, 2012 (PUC Docket No. 40443)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s general rate case proceeding to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
35. **Doyon Utilities, 2012 Alaska Rate Case (Docket No. TA7-717)** – Participated as an expert witness consultant on behalf of the Department of Defense to provide expert testimony in twelve rate case reviews for the utility systems of Fort Wainwright, Fort Greely and Joint Base Elmendorf-Richardson before the Regulatory Commission of Alaska.
36. **University of Oklahoma, 2012** – Participated as an expert witness on behalf of the University of Oklahoma to provide expert testimony on various revenue requirement issues in the University’s general rate case with the Corix Group, which provides utility services to the University.
37. **Public Service Company of Oklahoma, 2012 (Cause No. PUD 201200079)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission to provide expert testimony addressing the utility’s request to earn additional compensation on a 510MW purchased power agreement with Exelon
38. **Centerpoint Energy Texas Gas, 2012 (Docket No. GUD 10182)** – Participated as an expert witness on behalf of the Steering Committee of Cities before the Texas Railroad Commission to provide expert testimony on various revenue requirement issues.
39. **Entergy Texas Inc., 2012 (PUC Docket No. 39896)** – Participated as an expert witness on behalf of the Cities in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
40. **Oklahoma Natural Gas Company, 2012 (Cause No. PUD 2012-029)** – Participating as an expert witness on behalf of the OIEC before the OCC in ONG’s Performance Based Rate (“PBR”) application seeking Commission approval of a requested rate increase based upon formula results for

⁷ The Northern Nevada Utility Consumers is a group of large commercial and industrial customers in the SPPC service territory.

2011.

41. **University of Oklahoma, 2012** – Assisted the University of Oklahoma with an audit of the costs associated with its six utility operations and its contract with the Corix Group to provide utility services to the university.
42. **Oklahoma Gas and Electric Company, 2012 (Cause No. PUD 2011-186)** – Participating as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking Commission approval of a special contract with Oklahoma State University and a wind energy purchase agreement in connection therewith.
43. **Empire Electric Company, 2011, (Cause No. PUD 11-082)** – Participated as an expert witness on behalf of Enbridge before the OCC in Empire's rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
44. **Nevada Power Company, 2011, (Docket No. 11-04010)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group ("SNHG") before the Nevada PUC. Sponsored written and oral testimony to address proposed changes to the Company's customer deposit rules.
45. **Nevada Power Company, 2011, (Docket No. 11-06006)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
46. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2011-106)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application seeking rider recovery of third party SPP transmission costs and fees.
47. **Oklahoma Gas and Electric Company, 2011 (Cause No. PUD 2011-087)** – Participating as an expert witness on behalf of OIEC before the OCC in OG&E's rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
48. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-109-U)** – Participated as an expert witness on behalf of Gerdau Macsteel before the Arkansas Public Service Commission in OG&E's application to recover Smart Grid costs to make recommendations regarding the allocation of the Smart Grid costs.
49. **Oklahoma Gas & Electric Company, 2011 (Cause No. PUD 2011-027)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking to include retiree medical expense in the Company's pension tracker mechanism.
50. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of OIEC before the Oklahoma Corporation Commission in AEP/PSO's application to recover ice storm O&M expenses through a regulatory asset/rider mechanism to address tax impact and return issues in the proposed rider.
51. **Public Service Company of Colorado, 2011 (Docket No. 10AL-908E)** – Participated as an expert witness on behalf of the Colorado Retail Council ("CRC") before the Colorado Public Utilities Commission providing written and live testimony to address PSCo's proposed Environmental Tariff.

52. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-067-U)** – Participated as an expert witness on behalf of the Northwest Arkansas Industrial Energy Consumers (“NWIEC”)⁸ before the Arkansas Public Service Commission in OG&E’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
53. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-146)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking rider recovery of third party SPP transmission costs and SPP administration fees.
54. **Massachusetts Electric Co. & Nantucket Electric Co. d/b/a National Grid, 2010 (Docket No. DPU 10-54)** – Participated as an expert witness providing both written and live testimony before the Massachusetts Department of Public Utilities on behalf of the Associated Industries of Massachusetts (“AIM”) to address the Company’s proposed participation in the 438MW Cape Wind project in Nantucket Sound.
55. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of the OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
56. **Texas-New Mexico Power Co., 2010 (Docket 38480)** – Participating as an expert witness on behalf of the Alliance of Texas Municipalities (“ATM”) before the Texas PUC in TMNP’s general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
57. **Southwestern Public Service Co., 2010 (PUCT Docket No. 38147)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsor the AXM Accounting Exhibits.
58. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-37)** – Participating as an expert witness on behalf of OIEC before the OCC to address the preapproval and ratemaking treatment of OG&E’s 220MW self-build wind project.
59. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-29)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking pre-approval of deployment of smart-grid technology and rider-recovery of the associated costs. Sponsored written testimony to address smart-grid deployment and time-differentiated fuel rates.
60. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-01)** – Participated as an expert witness on behalf of the OIEC before the OCC in the Company’s proposed Green Energy Choice Tariff. Sponsored testimony to address the pricing and ratemaking treatment of the Company’s proposed wind subscription tariff.
61. **Nevada Power Company, 2010 (Docket No. 10-02009)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC to provide testimony in NPC’s Internal Resource Plan to address the ratemaking treatment of the proposed ON Line transmission line.
62. **Entergy Texas Inc., 2010 (PUC Docket No. 37744)** – Participating as an expert witness on behalf of

⁸ NWIEC is an association of industrial manufacturing facilities in northwest Arkansas.

the Cities in ETI's general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.

63. **El Paso Electric Company, 2010 (PUC Docket No. 37690)** – Participated as an expert witness on behalf of the City of El Paso in the EPI general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.
64. **Public Service Company of Oklahoma, 2009 (Cause No. 09-196)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application for approval of DSM programs and cost recovery. Sponsored testimony to address program costs, lost revenue recovery, cost allocations and incentives.
65. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 09-230 and 09-231)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E's application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
66. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 08-398)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E's rate case. Provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
67. **Nevada Power Company, 2009, (Docket No. 08-12002)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
68. **Public Service Company of Oklahoma, 2009 (Cause No. 09-031)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO's application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
69. **Oklahoma Natural Gas Co., 2009 (Cause No. PUD 08-348)** – Participated as an expert witness on witness on behalf of the OIEC before the OCC in ONG's application to establish a Performance Based Rate tariff. Sponsored both written and oral testimony to address the merits of the utility's proposed PBR.
70. **Rocky Mountain Power, 2009 (Docket No. 08-035-38)** – Participated as an expert witness on behalf of the Division of Public Utilities (Staff) in PacifiCorp's general rate case to provide testimony on various revenue requirement issues.
71. **Texas-New Mexico Power Co., 2008 (Docket 36025)** – Participating as an expert witness on behalf of the Alliance of Texas Municipalities ("ATM") before the Texas PUC in TMNP's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
72. **Public Service Company of Oklahoma, 2008 (Cause No. 08-144)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's general rate case application to address revenue requirement and rate design issues to establish prospective cost-of-service based rates.
73. **Public Service Company of Oklahoma, 2008 (Cause No. 08-150)** – Participated as an expert witness on behalf of the OIEC before the OCC to address PSO's calculation of its Fuel Clause

Adjustment for 2008.

74. **Oklahoma Gas and Electric Company, 2008 (Cause No. PUD 08-059)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking authorization of its Demand Side Management ("DSM") programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
75. **Entergy Gulf States, 2008 (PUC Docket No. 34800, SOAH Docket No. 473-08-0334)** – Participated as an expert witness on behalf of the Cities in EGSI's general rate case to provide testimony on various cost of service issues and on the utility's overall revenue requirement.
76. **Public Service Company of Oklahoma, 2008 (Cause No. 07-465)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application to recover the pre-construction costs of the cancelled Red Rock coal generation facility.
77. **Oklahoma Gas and Electric Company, 2008 (Cause No. 07-447)** – Participating as an expert witness on behalf of the OIEC before the OCC in OG&E's application seeking authorization to recover the pre-construction costs of the cancelled Red Rock coal generation facility using proceeds from sales of excess SO₂ allowances.
78. **Rocky Mountain Power, 2008 (Docket No. 07-035-93)** – Participating as an expert witness on behalf of Division of Public Utilities (Staff) in PacifiCorp's general rate case to provide testimony on various revenue requirement issues.
79. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-449)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application seeking authorization of its Demand Side Management ("DSM") programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
80. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-397)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO's application seeking authorization to defer storm damage costs in a regulatory asset account and to recover the costs using the proceeds from sales of excess SO₂ allowances.
81. **Oklahoma Gas & Electric Co., 2007 (Cause No. PUD 07-012)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E's application seeking pre-approval to construct the Red Rock coal plant to address the Company's proposed rider recovery mechanism.
82. **Oklahoma Natural Gas Co., 2007 (Cause No. PUD 07-335)** – Participated as an expert witness on behalf of the OIEC before the OCC in ONG's application proposing alternative cost recovery for the Company's ongoing capital expenditures through the proposed Capital Investment Mechanism Rider ("CIM Rider"). Sponsored testimony to address ONG's proposal.
83. **Public Service Company of Oklahoma, 2007 (Cause No. PUD 06-030)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's application seeking a used and useful determination for its planned addition of the Red Rock coal plant to address the Company's use of debt equivalency in the competitive bidding process for new resources.
84. **Public Service Company of Oklahoma, 2006 (Cause No. PUD 06-285)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.

85. **Nevada Power Company, 2007, (Docket No. 07-01022)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
86. **Nevada Power Company, 2006, (Docket No. 06-11022)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
87. **Southwestern Public Service Co., 2006 (PUCT Docket No. 37766)** - Participated as an expert witness on behalf of the Alliance of Xcel Municipalities ("AXM") in the SPS general rate case application. Provided testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsored the Accounting Exhibits on behalf of AXM.
88. **Atmos Energy Corp., Mid-Tex Division, 2006 (Texas GUD 9676)** - Participated as an expert witness in the Atmos Mid-Tex general rate case application on behalf of the Atmos Texas Municipalities ("ATM"). Provided written and oral testimony before the Railroad Commission of Texas regarding the revenue requirements of Mid-Tex including various rate base, operating expense, depreciation and tax issues. Sponsored the Accounting Exhibits for ATM.
89. **Nevada Power Company, 2006 (Docket No. 06-06007)** - Participated as an expert witness on behalf of the MGM MIRAGE in the Sinatra Substation Electric Line Extension and Service Contract case. Provided both written and oral testimony before the Nevada Public Utility Commission to provide the Commission with information as to why the application is consistent with the line extension requirements of Rule 9 and why the cost recovery proposals set forth in the application provide a least cost approach to adding necessary new capacity in the Las Vegas strip area.
90. **Public Service Co. of Oklahoma, 2006 (Cause No. PUD 05-00516)** - Participated as an expert witness on behalf of the OIEC to review PSO's application for a "used and useful" determination of its proposed peaking facility.
91. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 06-00041)** - Participated as an expert witness on behalf of the OIEC in OG&E's application to propose an incentive sharing mechanism for SO₂ allowance proceeds.
92. **Chermac Energy Corporation, 2006 (Cause No. PUD 05-00059 and 05-00177)** - Participated as an expert witness on behalf of the OIEC in Chermac's PURPA application. Sponsored written responsive and rebuttal testimony to address various rate design issues arising under the application.
93. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 05-00140)** - Participated as an expert witness on behalf of the OIEC in OG&E's 2003 and 2004 Fuel Clause reviews. Sponsored written testimony to address the purchasing practices of the Company, its transactions with affiliates, and the prices paid for natural gas, coal and purchased power.
94. **Nevada Power Company, 2006, (Docket No. 06-01016)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written testimony in NPC's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
95. **Oklahoma Gas and Electric Co., 2005 (Cause No. PUD 05-151)** - Participated as an expert witness on behalf of the OIEC in OG&E's general rate case application. Sponsored both written and oral

testimony before the OCC to address various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates.

96. **Oklahoma Natural Gas Co., 2005 (Cause No. PUD 04-610)** – Participated as an expert witness on behalf of the Attorney General of Oklahoma. Sponsored written and oral testimony to address numerous rate base, operating expense and depreciation issues for the purpose of setting prospective cost-of-service based rates.
97. **CenterPoint Energy Arkla, 2004 (Cause No. PUD 04-0187)** – Participating as an expert witness on behalf of the Attorney General of Oklahoma: Sponsored written testimony to provide the OCC with analysis from an accounting and ratemaking perspective of the Co.'s proposed change in depreciation rates from an Average Life Group to an Equal Life Group methodology. Addressed the Co.'s proposed increase in depreciation rates associated with increased negative salvage value calculations.
98. **Public Service Co. of Oklahoma, 2004 (Cause No. PUD 02-0754)** – Participated as an expert witness on behalf of the OIEC. Sponsored written testimony (1) making adjustments to PSO's requested recovery of an ICR programming error, (2) correcting errors in the allocation of trading margins on off-system sales of electricity from AEP East to West and among the AEP West utilities and (3) recommending an annual rather than a quarterly change in the FAC rates.
99. **PowerSmith Cogeneration Project, 2004 (Cause No. PUD 03-0564)** - Participated as an expert witness on behalf of the OIEC to provide the OCC with direction in setting an avoided cost for the PowerSmith Cogeneration project under PURPA requirements. Provided both written and oral testimony on the provisions of the proposed contract under PURPA:
100. **Electric Utility Rules for Affiliate Transactions, 2004 (Cause No. RM 03-0003)** – Participated as a consultant on behalf of the OIEC to draft comments to assist the OCC in developing rules for affiliate transactions. Assisted in drafting the proposed rules. Successful in having the Lower of Cost or Market rule adopted for affiliate transactions in Oklahoma.
101. **Nevada Power Company, 2003, (Docket No. 03-10001)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
102. **Nevada Power Company, 2003, (Docket No. 03-11019)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
103. **Public Service Company of Oklahoma, 2003 (Cause No. PUD 03-0076)** – Participating as an expert witness on behalf of the OIEC before the OCC in PSO's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
104. **Oklahoma Gas & Electric Co., 2003 (Cause No. PUD 03-0226)** – Participated as an expert witness on behalf of the OIEC. Provided both written and oral testimony before the OCC to determine the appropriate level to include in rates for natural gas transportation and storage services acquired from an affiliated company.
105. **Nevada Power Company, 2003 (Docket No. 02-5003-5007)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony to calculate the appropriate exit fee in MGM Mirage's 661 Application to leave the system.

106. **McCarthy Family Farms, 2003** – Participated as a consultant to assist McCarthy Family Farms in converting a biomass and biosolids composting process into a renewable energy power producing business in California.
107. **Bice v. Petro Hunt, 2003 (ND, Supreme Court No. 20030306)** - Participated as an expert witness in a class certification proceeding to provide cost-of-service calculations for royalty valuation deductions for natural gas gathering, dehydration, compression, treatment and processing fees in North Dakota.
108. **Nevada Power Company, 2003 (Docket No. 03-11019)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power. Provided written and oral testimony on the reasonableness of the cost allocations to the utility's various customer classes.
109. **Wind River Reservation, 2003 (Fed. Claims Ct. No. 458-79L, 459-79L)** – Participated as a consulting expert on behalf of the Shoshone and Arapaho Tribes to provide cost-of-service calculations for royalty valuation deductions for gathering, dehydration, treatment and compression of natural gas and the reasonableness of deductions for gas transportation.
110. **Oklahoma Gas & Electric Co., 2002 (Cause No. PUD 01-0455)** – Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored written and oral testimony on numerous revenue requirement issues including rate base, operating expense and rate design issues to establish prospective cost-of-service based rates.
111. **Nevada Power Company, 2002 (Docket No. 02-11021)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power and to make recommendations with respect to rate design.
112. **Nevada Power Company, 2002 (Docket No. 01-11029)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power included in the Company's \$928 million deferred energy balances.
113. **Nevada Power Company, 2002 (Docket No. 01-10001)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
114. **Chesapeake v. Kinder Morgan, 2001 (CIV-00-397L)** - Participated as an expert witness on behalf of Chesapeake Energy in a gas gathering dispute. Sponsored testimony to calculate and support a reasonable rate on the gas gathering system. Performed necessary calculations to determine appropriate levels of operating expense, depreciation and cost of capital to include in a reasonable gathering charge and developed an appropriate rate design to recover these costs.
115. **Southern Union Gas Company, 2001** - Participated as a consultant to the City of El Paso in its review of SUG's gas purchasing practices, gas storage position, and potential use of financial hedging instruments and ratemaking incentives to devise strategies to help shelter customers from the risk of high commodity price spikes during the winter months.

116. **Nevada Power Company, 2001** - Participated as an expert witness on behalf of the MGM-Mirage, Park Place and Mandalay Bay Group before the Nevada Public Utility Commission to review NPC's Comprehensive Energy Plan (CEP) for the State of Nevada and make recommendations regarding the appropriate level of additional costs to include in rates for the Company's prospective power costs associated with natural gas and gas transportation, coal and coal transportation and purchased power.
117. **Bridenstine v. Kaiser-Francis Oil Co. et al., 2001 (CJ-95-54)** - Participated as an expert witness on behalf of royalty owner plaintiffs in a valuation dispute regarding gathering, dehydration, metering, compression, and marketing costs. Provided cost-of-service calculations to determine the reasonableness of the gathering rate charged to the royalty interest. Also provided calculations as to the average price available in the field based upon a study of royalty payments received on other wells in the area.
118. **Klatt v. Hunt et al., 2000 (ND)** - Participated as an expert witness and filed report in United States District Court for the District of North Dakota in a natural gas gathering contract dispute to calculate charges and allocations for processing, sour gas compression, treatment, overhead, depreciation expense, use of residue gas, purchase price allocations, and risk capital.
119. **Oklahoma Gas and Electric Co., 2000 (Cause No. PUD 00-0020)** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Generation Efficiency Performance Rider (GEPR). Provided a list of criteria with which to measure a utility's proposal for alternative ratemaking. Recommended modifications to the Company's proposed GEPR to bring it within the boundaries of an acceptable alternative ratemaking formula.
120. **Oklahoma Gas and Electric Co., 1999** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Performance Based Ratemaking (PBR) proposal including analysis of the Company's regulated return on equity, fluctuations in the capital investment and operating expense accounts of the Company and the impact that various rate base, operating expense and cost of capital adjustments would have on the Company's proposal.
121. **Nevada Power Company, 1999 (Docket No. 99-7035)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony addressing the appropriate ratemaking treatment of the Company's deferred energy balances, prospective power costs for natural gas, coal and purchased power and deferred capacity payments for purchased power.
122. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to unbundle the utility services of the NPC and to establish the appropriate cost-of-service allocations and rate design for the utility in Nevada's new competitive electric utility industry.
123. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to establish the cost-of-service revenue requirement of the Company.
124. **Nevada Power/Sierra Pacific Merger, 1998 (Docket No. 98-7023)** - Participated as an expert witness on behalf of the Mirage and MGM Grand before the Nevada PUC. Sponsored written and oral testimony to establish (1) appropriate conditions on the merger (2) the proper sequence of regulatory events to unbundle utility services and deregulate the electric utility industry in Nevada (3) the proper accounting treatment of the acquisition premium and the gain on divestiture of generation assets. The recommendations regarding conditions on the merger, the sequence of regulatory events to unbundle and deregulate, and the accounting treatment of the acquisition premium were

specifically adopted in the Commission's final order.

125. **Oklahoma Natural Gas Company, 1998 (Cause No. PUD 98-0177)** - Participated as an expert witness in ONG's unbundling proceedings before the OCC. Sponsored written and oral testimony on behalf of Transok, LLC to establish the cost of ONG's unbundled upstream gas services. Substantially all of the cost-of-service recommendations to unbundle ONG's gas services were adopted in the Commission's interim order.
126. **Public Service Company of Oklahoma, 1997 (Cause No. PUD 96-0214)** - Audited both rate base investment and operating revenue and expense to determine the Company's revenue requirement and cost-of-service. Sponsored written testimony before the OCC on behalf of the OIEC.
127. **Oklahoma Natural Gas /Western Resources Merger, 1997 (Cause No. PUD 97-0106)** - Sponsored testimony on behalf of the OIEC regarding the appropriate accounting treatment of acquisition premiums resulting from the purchase of regulated assets.
128. **Oklahoma Gas and Electric Co., 1996 (Cause No. PUD 96-0116)** - Audited both rate base investment and operating income. Sponsored testimony on behalf of the OIEC for the purpose of determining the Company's revenue requirement and cost-of-service allocations.
129. **Oklahoma Corporation Commission, 1996** - Provided technical assistance to Commissioner Anthony's office in analyzing gas contracts and related legal proceedings involving ONG and certain of its gas supply contracts. Assignment included comparison of pricing terms of subject gas contracts to portfolio of gas contracts and other data obtained through annual fuel audits analyzing ONG's gas purchasing practices.
130. **Tenkiller Water Company, 1996** - Provided technical assistance to the Attorney General of Oklahoma in his review of the Company's regulated cost-of-service for the purpose of setting prospective utility rates.
131. **Arkansas Oklahoma Gas Company, 1995 (Cause No. PUD 95-0134)** - Sponsored written and oral testimony before the OCC on behalf of the Attorney General of Oklahoma regarding the price of natural gas on AOG's system and the impact of AOG's proposed cost of gas allocations and gas transportation rates and tariffs on AOG's various customer classes.
132. **Enogex, Inc., 1995 (FERC 95-10-000)** - Analyzed Enogex's application before the FERC to increase gas transportation rates for the Oklahoma Independent Petroleum Association and made recommendations regarding revenue requirement, cost-of-service and rate design on behalf of independent producers and shippers.
133. **Oklahoma Natural Gas Company, 1995 (Cause No. PUD 94-0477)** - Analyzed a portfolio of ONG's gas purchase contracts in the Company's Payment-In-Kind (PIC) gas purchase program and made recommendations to the OCC Staff on behalf of Terra Nitrogen, Inc. regarding the inappropriate profits made by ONG on the sale of the gas commodity through the PIC program pricing formula. Also analyzed the price of gas on ONG's system, ONG's cost-of-service based rates, and certain class cross-subsidizations in ONG's existing rate design.
134. **Arkansas Louisiana Gas Company, 1994 (Cause No. PUD 94-0354)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of the other auditors on the case. Sponsored cost-of-service testimony on cash working capital and developed policy recommendations on post test year adjustments.

135. **Empire District Electric Company, 1994 (Cause No. PUD 94-0343)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of other auditors. Sponsored cost-of-service testimony on rate base investment areas including cash working capital.
136. **Oklahoma Natural Gas Company, 1992 through 1993 (Cause No. PUD 92-1190)** - Planned and supervised the rate case audit of ONG for the OCC Staff. Reviewed all workpapers and testimony of the other auditors on the case. Sponsored written and oral testimony on numerous cost-of-service adjustments. Analyzed ONG's gas supply contracts under the Company's PIC program.
137. **Oklahoma Gas and Electric Company, 1991 through 1992 (Cause No. PUD 91-1055)** - Audited the rate base, operating revenue and operating expense accounts of OG&E on behalf of the OCC Staff. Sponsored written and oral testimony on numerous revenue requirement adjustments to establish the appropriate level of costs to include for the purpose of setting prospective rates.

ARIZONA PUBLIC SERVICE
EFCA WORKPAPERS - SUMMARY OF PROPOSED ADJUSTMENTS
 Test Year Ended 12-31-15
 Docket No. E-01345A-16-0036

Ln	Description	Witness	Ref.	Rate Base Items	ROR W/Tax	ACC Jurisdiction
1	APS PROPOSED GROSS RATE INCREASE	APS Att. CAM-2DR				\$ 433,433
2	Less: Current Rider Revenues Being Moved into Base F		↓			\$ (267,551)
3	Net Effective APS Proposed Rate Increase					\$ 165,882
4	Rate Base Adjustments			\$ 6,771,151		
5	Total Rate Base Adjustments			\$ -		
6	Cost of Capital Adjustments	D Garrett	MG2.3			
7	To Apply EFCA ROE and Capital Structure Adjustm	ROE 9.000%	Equity % 50%	\$ 6,771,151	-1.898%	\$ (128,511)
8	Revenue Requirement Adjustments					
9	To Adjust Retail Sales Growth to July 2017	M Garrett	MG2.1			\$ (28,626)
10	To Remove 50% of Pro Forma Incentive Expense	M Garrett	MG2.2			\$ (16,971)
11	To Adjust Short-term Incentive Payroll Tax Expense	M Garrett	MG2.2			\$ (1,139)
12	To Exclude 50% of EEI Dues	M Garrett	MG2.3			\$ (352)
13	To Apply EFCA's Depreciation Rates	D Garrett				\$ (45,931)
14	To Remove APS Fair Value Adder	M Garrett	APS Sch A-1			\$ (51,866)
15	Total EFCA Proposed Adjustments					\$ (273,396)
16	EFCA PROPOSED NET RATE DECREASE					\$ (107,514)

ARIZONA PUBLIC SERVICE
 EFCA WORKPAPERS - REVENUE GROWTH ADJUSTMENT
 Test Year Ended 12-31-15
 Docket No. E-01345A-16-0036

Line No.	Description	ACC Jurisdiction			EFCA Adjustment	
		Test Year Ended 12/31/2015	Pro forma Adjustments	Test Year Results After Pro forma Adjustments	Retail Sales Growth Rate 1.5% per year	Adjustment
		(A)	(B)	(C)	(D)	
1	Growth Rate (1.5% x 1.5 years = 2.25%)				2.25%	
2	<u>Electric Operating Revenues</u>					
3	Revenues from Base Rates	\$ 2,865,563	\$ 23,340	\$ 2,888,903	\$ 2,953,903	\$ 65,000
4	Revenues from Surcharges	408,240	(408,240)	-		
5	Other Electric Revenues	162,496	(3,946)	158,550	\$ 162,117	\$ 3,567
6	Totals	<u>3,436,299</u>	<u>(388,846)</u>	<u>3,047,453</u>	<u>3,116,021</u>	<u>68,568</u>
7	<u>Operating Expenses:</u>					
8	Electric fuel and purchased power	1,094,373	(102,311)	992,062	\$ 1,014,383	\$ 22,321
9	Base Revenue Adjustment through June 2017, Excluding Fuel and Purchased Power					\$ 46,246
10	Tax Expense				38.10%	\$ (17,620)
11	EFCA Revenue Adjustment through June 2017 (Net of Tax)					<u>\$ 28,626</u>

ARIZONA PUBLIC SERVICE
EFCA WORKPAPERS - INCENTIVE EXPENSE ADJUSTMENT
Test Year Ended 12-31-15
Docket No. E-01345A-16-0036

Line	Description	Ref.	ACC Jurisdiction			
			Total APS	(000)		
				Operations	Maintenance	A&G
1	Pro Forma Short-Term Incentive Expense (After APS Adjustment)	Staff 12-18(h)	\$33,941	\$ 22,747	\$ 734	\$ 10,460
2	Sharing Percentage		50%	50%	50%	50%
3	EFCA Short-Term Incentive Adjustment		\$16,971	\$ 11,374	\$ 367	\$ 5,230
4	Payroll Tax Rate	Staff 12-18(f)	6.713%	6.713%	6.713%	6.713%
5	EFCA Short-Term Incentive Payroll Tax Adjustment		\$ 1,139	\$ 764	\$ 25	\$ 351

ARIZONA PUBLIC SERVICE
 EFCA WORKPAPERS - EEI DUES EXPENSE ADJUSTMENT
 Test Year Ended 12-31-15
 Docket No. E-01345A-16-0036

Line	Description	Ref.	Amounts (000)
1	EEI Dues in Test Year Expense	Prefiled 1.54	\$ 1,188
2	Sharing Percentage based on Prior Orders	Decisions 71914 & 70860	50%
3	EEI to Exclude from Rates	Calculated	\$ (594)
4	EEI Dues Already Excluded by APS	Prefiled 1.54	\$ 242
5	EFCA EEI Dues Adjustment		\$ (352)

ARIZONA PUBLIC SERVICE
 EFCA WORKPAPERS - COST OF CAPITAL ADJUSTMENTS
 Test Year Ended 12-31-15
 Docket No. E-01345A-16-0036

APS Proposed:

Ln.	Description	Capital Structure	Cost	Wt Avg	Tax	ROR
1	Long Term Debt	44.20%	5.13%	2.267%	1.00000	2.267%
2	Preferred	0.00%	0.00%	0.000%		
3	Common Equity	55.80%	10.50%	5.859%	1.6155	9.465%
4		100.000%		8.126%		11.733%

EFCA Proposed:

Ln.	Description	Capital Structure	Cost	Wt Avg	Tax	ROR
5	Long Term Debt	50.000%	5.13%	2.57%	1.00000	2.57%
6	Preferred	0.000%	0.00%	0.00%		
7	Common Equity	50.000%	9.000%	4.50%	1.6155	7.27%
8		100.000%		7.07%		9.83%

9 EFCA Proposed Adjustment to ROR

-1.898%

Exhibit MG-3 - CONFIDENTIAL